

THOMSON

10MG73B

MODEL

SERVICE MANUAL

THOMSON CONSUMER ELECTRONICS

NORDMENDE
THOMSON TECHNOLOGY

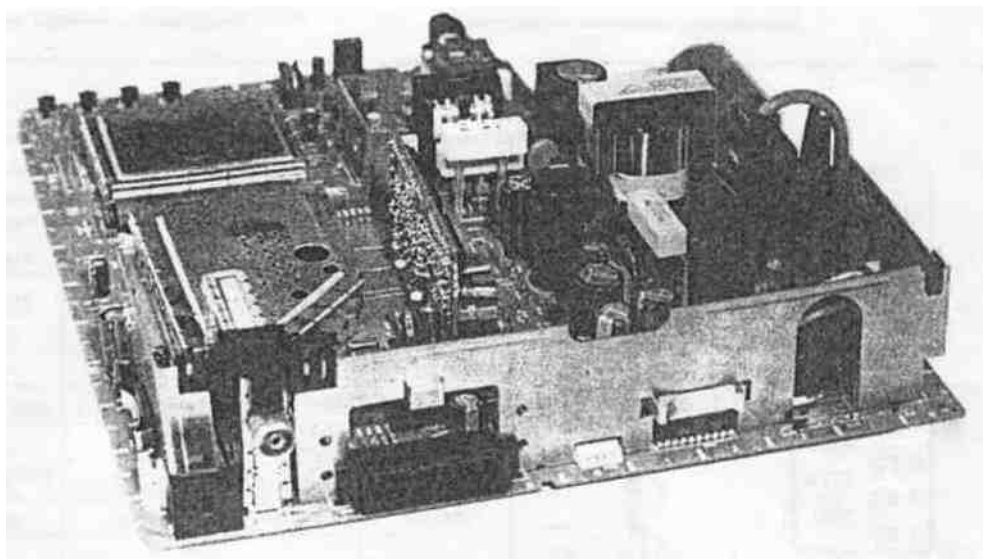
SABA

TELEFUNKEN

THOMSON

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

Chassis TX91



/f/ Indicates specially selected or critical safety components and identical components should be used for their replacement. This is necessary in order to maintain the operational safety of the receiver.

Le remplacement des éléments de sécurité (reperes avec le symbole /f/) par des composants non homologues selon la Norme CEI 65 entraîne la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol /f/ gekennzeichnet) nicht durch Original-Ersatzteile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (marchi con il segno/f/) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio. In tal caso è "esclusa la responsabilità" del costruttore.

La substitucion de elementos de seguridad (marcados con el símbolo ZfX) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

MEASUREMENT CONDITIONS - CONDITIONS DE MESURES - MESSBEDINGUNGEN CONDIZIONI DI MISURA - CONDICIONES DE MEDIDAS

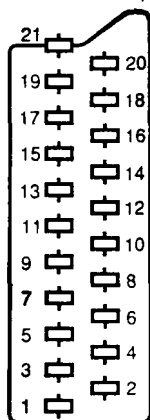
RECEIVER: UHF Input level: 1 mV test bar pattern.
RM 1 standard. 100% white
Scan input level: 1.0 Vpp test bar pattern.
Programme PR01. Customer controls,
Contrast, brightness and colour set at mid point
and sound at minimum.
All DC voltages are measured with a digital meter
between ground and the reference point.

MCEVnORE InUHF: Mbd'enntalm'monosoxiopwbatre:
PAL, nonnaG.bBncollj0%.
Pei la piessa SCART. Inw/d'ernata 1 Vcc. moniscok pM barn:
Cokoe. CwrrasB. Luc: a mea area. Suoni mmino.
Proyanilla designat PR 01
Tensiau continue ntevatte nspelo aia massa con ulivnametro nullivica.

RECEITEUR: E¹, F¹ mau c'entee i mV mire de banes
SECOil Noun L Bane IV.
Par a yse PssSmm. mw0Hlee I Vcc. aurede tons.
ca^ srtsle. tonwe a m-owx. son mimm.
Ptcwi-»a«eaePRjIj.
ascrecsranuesretaleespatrpapnlalTasstMciin
icawie tuname

EMPFANGER: Be UHF Encanspiegel 1 mV. Faltoken:
PAL. Norm 6 WMS 100%.
unel y Sca."uc's": Encassoegd 1 Vss Faaattn:
Faite Koriaa Heidkm in to Mite des teachs Ton auf Mimm
ZugewonresPicramnPROI.
a«icB(a)OrWjn«teintindiolalM*llivw»arties«g«sstii

BECEPTOR: En UHF, ml de frntada 1 mV, m A banas:
PAL, norma G. fanco 1011%.
Pa b tana Penleleisoi. n«ei ae emnd 1 Vet roa * tiara.
Cola. Conlaste. uz a miud de emu Smdo mmmu.
PfaiaramaafectaooPROI,
TensioriescontinuasmarcadasafinlaQona"masa con unilivmetrodigital.



NOTE : (MAIN) ... etc. identifies each
pcb module.

NOTE : (MAIN)... etc. reperes des
platinas constituant l'appareil.

HINWEIS : (MAIN) ... usw.
Kennzeichnungen der Platinen, aus
denen das Gerät zusammengesetzt ist.

NOTA : (MAIN)... ecc. indicazioni
delle piastre che costituiscono
l'apparecchio.

NOTA : (MAIN)... etc. marcas de las
placas que constituyen el aparato.

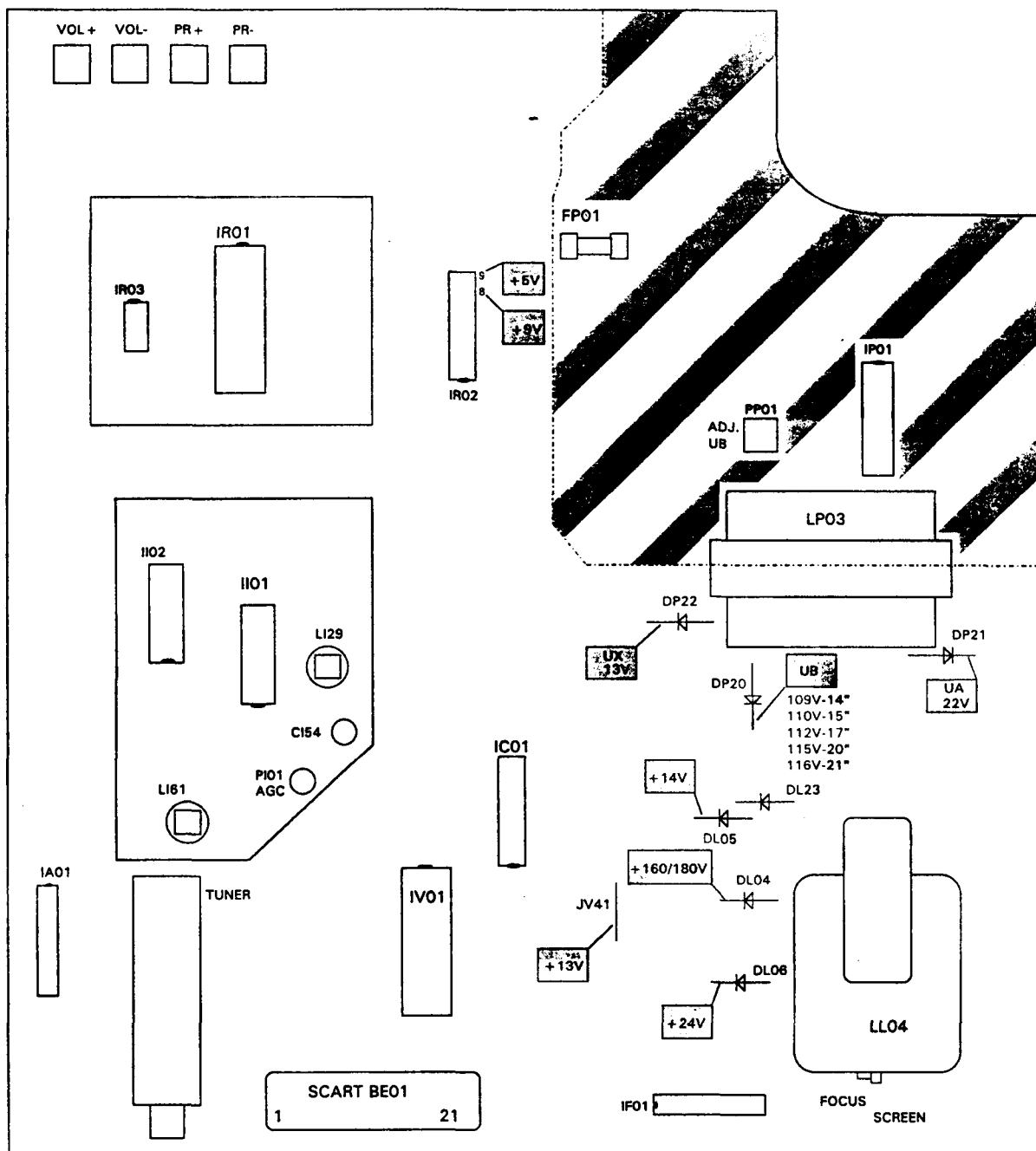
	ENGLISH	FRANCAIS	DEUTSCH	ITALIANO	ESPAÑOL
1 G»	AUDIO "R"	AUDIO "D"	AUDIO -R"	AUDIO "0"	AUDIO "D"
2 ^)	AUDIO "R"	AUDIO "D-	AUDIO "R"	AUDIO "D"	AUDIO "D"
3 G»	AUDIO "L"	AUDIO -G"	AUDIO "L"	AUDIO "S"	AUDIO "I"
4 —	AUDIO	AUDIO	AUDIO	AUDIO	AUDIO
5 —	• BLUE"	• BLEU -	"BLAU"	"BLU"	"AZUL"
6 -R	AUDIO •L' MONO	AUDIO -G- MONO	AUDIO •L' MONO	AUDIO •S' MONO	AUDIO •L' MONO
7 ^)	• BLUE •	"BLEU •	•BLAU"	BLU	AZUL
8 -R	SLOW SWITCH	COMMUT. LENTE	AV UMSCHALTUNG	•COMMUTAZIONE LENTA"	•CONMUTACION LENTA-
9 -.	• GREEN"	"VERT"	•GRUN"	"VERDE"	"VERDE"
10 NC					
11 -R	"GREEN"	"VERT™	"GRUN"	"VERDE"	"VERDE-
12 NC					
13 —	• RED"	"ROUGE"	"ROT"	•ROSSO"	"ROJA"
14 NC					
15 -^	• RED-	"ROUGE-	"ROT"	"ROSSO"	"ROJA"
16 ^)	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	•COMMUTAZIONE RAPIDA-	•CONMUTACION RAPIDA-
17 —	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
18 —	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	•COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
19 O»	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
20 -C	VIDEO OR "SYNC"	VIDEO SYNCHRO	VIDEOODER SYNCHRO	VIDEO OSINCRO	VIDEO 0 SINCRO
21 O»	PLUGSCREEN BOX	BLINDAGE PRISE	ABSCHIRMUNG DES STECKERS	ARMATURA DELLA SPINA	BLINDAJE DEL ENCHUFE

➡ : OUTPUT - SORTIE - AUSGANG - USCITA - SALIDA

⬅ : INPUT - ENTREE - EINGANG - ENTRATA - ENTRADA

⬇ : EARTH - MASSE - MASSE - MASSA - MASA

LOCATION OF CONTROLS - EMBLACEMENT DES REGLAGES - SERVICE LAGEPLAN
POSIZIONE REGOLATORI DI SERVIZIO - SITUACION DE LOS AJUSTES



ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONE - AJUSTES

UB	PP 01	Contrast, brightness and volume to minimum		14" : 109 V 15" : 110V 17" : 112V 20" : 115V 21" : 116V
U G2	SCREEN	AV (no Signal, black screen)		130V-14" 140V-17" 160V-20"
Focus	FOCUS	Test pattern (standard values)		Sharp picture

SERVICE MODE

It is necessary to enter the Service Mode in order to carry out alignment of the TV set. Most adjustments can be made with the RCU, except the Ussystem, Focus and Screen voltages.

1. Service Mode Access

- 1.1 With the RCU, switch the TV set into the "Standby" mode.
- 1.2 Switch "Off" the TV set using the mains supply switch.
- 1.3 Whilst depressing the RCU "Blue(VT)" button, switch "On" the TV set using the mains supply switch.
- 1.4 Release and press once again the RCU "Blue(VT)" button, the following "Set-Up" menu should be displayed.

SET-UP	VIDEO	GEOM
xxx 123456789		Configuration

Important: The Service Mode cannot be entered if any equipment is connected to the Scart socket, i.e. pin 8 switching voltage present.

2. Function Selection

- 2.1 With the Volume "+" and "-" RCU buttons, highlight the menu containing the function to be aligned.
- 2.2 Press the RCU "Blue(VT)" button to highlight the function to be aligned.

3. Switching between Service and TV modes

- 3.1 Whilst in the Service Mode, normal TV controls are disabled, to enable these controls whilst in the Service mode (i.e. for channel changing etc.) press the "TV" button on the RCU. To return to the Service mode, press the "Blue(VT)" button on the RCU

4. Alignment and storing new function value

- 4.1 The current value of the selected function is displayed in an hexadecimal form to the right of the functions name. This value is adjusted by means of the Volume "+" and "-" RCU buttons.
- 4.2 To STORE the functions new value, highlight MEMO and press the Volume "+" RCU button.
- 4.3 To RESTORE the functions original value, highlight R-STO(RE) and press the Volume "+" RCU button.
- 4.4 Selecting the ROM function downloads the production software default values, these are not very accurate and should only be used in very special cases.

5. Leaving the Service Mode

- 5.1 To leave the Service mode either, switch the TV set into "Standby" or switch "Off" the mains supply.

SERVICE-MODE

Der Service-Mode wird für den Geräteabgleich benötigt. Alle Einstellungen erfolgen mit der Fernbedienung (bis auf Systemspannung, Fokuseinstellung und Schirmgitterspannung).

1. Service-Mode einschalten

- 1.1 Mit der Fernbedienung das Fernsehgerät in Stand-by schalten.
- 1.2 Das Gerät mit dem Netzschalter ausschalten.
- 1.3 Die blaue Taste der Fernbedienung gedrückt halten und gleichzeitig das Gerät mit dem Netzschalter einschalten.
- 1.4 Das folgende Menü erscheint nach erneutem Drücken der blauen Taste

SET-UP	VIDEO	GEOM
xxx 123456789		Configuration

Achtung: Der Service-Mode läßt sich nicht einschalten, wenn an einer Euro-AV-Buchse ein Gerät aktiviert ist. d.h. die Schaltspannung anliegt.

2. Funktionswahl

Mit den Tasten +/- wird das entsprechende Menü gewählt, welches mit der blauen Taste "durchgeblättert" wird.

3. Umschalten zwischen Service- und TV-Betrieb

Im Service-Mode sind die normalen Fernsehfunktionen nicht bedienbar. Werden diese im Service-Mode benötigt (z.B. Programmwechsel), kann mit der Taste (TV) in den normalen TV-Betrieb geschaltet werden. Durch Drücken der blauen Taste gelangt man zurück zum Service Mode.

4. Abgleich der gewählten Funktion und Speichern

Der momentane Wert der gewählten Funktion wird hexadezimal rechts neben der abzugleichenden Position angegeben und kann mit der Taste + bzw. - auf der Fernbedienung verändert werden.

Die Änderungen des jeweiligen Menüs können unter MEMO mit der Taste gespeichert bzw. unter R-STO(RE) rückgängig gemacht werden.

Im Menüpunkt ROM kann man die Software-Defaultwerte laden. Sie sind aber nur eine grobe Annäherung an den noch vorzunehmenden Abgleich und sollten nur im Notfall verwendet werden.

5. Service-Mode verlassen

Zum Verlassen des Service-Mode das Gerät in Stand By schalten Oder mit dem Netzschalter ausschalten.

MODE SERVICE

Le mode service sert au réglage de l'appareil. Toutes les opérations de réglage s'effectuent à l'aide de la télécommande (sauf la tension de système, les mises au point et les tensions de grille-écran).

1. Accès du mode service

- 1.1 Commuter le téléviseur en position de veille avec la télécommande
- 1.2 Mettre le téléviseur hors service par l'interrupteur secteur.
- 1.3 -Maintenir la touche bleue enfoncée et mettre simultanément le téléviseur en marche avec l'interrupteur secteur.
- 1.4 Le menu suivant apparaît après avoir appuyé à nouveau sur la touche bleue

SET-UP	VIDEO	GEOM
xxx 123456789		Configuration

Attention : Le mode service n'est pas accessible si un appareil est connecté à la prise peritélévision.

2. Selection de la fonction

Par les touches +/- de la télécommande vous pouvez choisir le menu correspondant (SET UP, VIDEO ou GEOM) et le "feuilleter" avec la touche bleue(VT).

3. Inversion entre modes service et TV

Les fonctions télévision normales ne sont pas utilisables en mode service. Si elles sont nécessaires en mode service (p. ex. changement de programme), la touche (TV) permet de commuter en mode TV. Vous pouvez revenir au mode service en appuyant sur la touche bleue.

4. Réglage des fonctions sélectionnées et mémorisation

La valeur momentanée de la fonction sélectionnée est indiquée sous forme hexadécimale à droite, à côté de la position à régler et peut être modifiée avec la télécommande par la touche + ou -.

La ligne MEMO permet de mémoriser les nouvelles valeurs de réglage avec la touche +. La ligne R-STO(RE) permet de rappeler les valeurs mémorisées en NVM. Les valeurs par défaut du logiciel peuvent être chargées en sélectionnant la ligne ROM. Elles ne constituent cependant qu'une approximation du réglage et ne doivent être utilisées qu'en cas de nécessité.

5. Abandon du mode service

Pour abandonner le mode service, commuter le téléviseur en position de veille ou le mettre hors service par l'interrupteur secteur.

SERVICE-MODE

Il Service-Mode è necessario per l'allineamento dell'apparecchio. Tutte le regolazioni si effettuano con il telecomando. (a parte la tensione del sistema, la regolazione del fuoco e le tensioni della griglia schermo).

1. Attivazione del Service-Mode

- 1.1 Commutare il televisore in stand-by con il telecomando.
- 1.2 Spegner l'apparecchio con l'interruttore di rete.
- 1.3 Tenere premuto il pulsante blu e accendere contemporaneamente l'apparecchio con l'interruttore di rete.
- 1.4 Il seguente menu appare non appena si aziona nuovamente il pulsante blu

SET-UP	VIDEO	GEOM
xxx 123456789		Configuration

Attenzione: Il Service-Mode non si può attivare se è attivato un apparecchio collegato alla presa di peritelerivisione AV, dove se è presente la tensione ausiliaria.

2. Scelta della funzione

Con i tasti +/- si seleziona il relativo menu che può "essere sfogliato" con il pulsante blu.

3. Commutazione fra funzione Service-Mode e TV

Nella modalità Service-Mode non si possono attivare le normali funzioni televisive. Se occorre richiamarle in Service-Mode (ad es. se si vuole cambiare il programma), si può attivare la normale modalità TV con il pulsante (TV). Premendo il pulsante blu si riattiva il Service-Mode.

4. Taratura della funzione scelta e memorizzazione

Il valore momentaneo della funzione scelta viene indicato in formato esadecimale a destra, accanto alla posizione da allineare e può essere cambiato con il pulsante + o - del telecomando.

Le modifiche effettuate nei relativi menu si possono memorizzare in MEMO con il pulsante + oppure annullare in R-STO(RE).

Nell'opzione di menu ROM si possono caricare i valori di default del software. Essi rappresentano però una taratura approssimativa prima di eseguire quella definitiva e si dovrebbero usare solo in caso di emergenza.

5. Disattivazione del Service-Mode

Per disattivare il Service-Mode, commutare l'apparecchio in stand-by o spegnerlo con l'interruttore di rete.

MODO SERVICIO ©

Se necesita el MODO SERVICIO para ajustar el aparato. Todos los ajustes se hacen con el mando a distancia (a excepción de la tensión del sistema, los ajustes del tico y las tensiones de la rejilla de pantalla).

1. AJUSTAR el MODO SERVICIO

- 1.1 Con el mando a distancia conectar a STANDBY el televisor.
- 1.2 Desconectar el aparato con el interruptor de la red.
- 1.3 Mantener pulsada la tecla azul y conectar el aparato simultáneamente con el interruptor de red.
- 1.4 El menú siguiente aparece volviendo a pulsar la tecla azul.

S	E	T	-	U	P		V	I	D	E	O	I	G	E	O	M	I
xxx	123456789	Configuration															

Atención: No se puede conectar el MODO SERVICIO cuando en Eurotoma-AV está activado un aparato, es decir, cuando existe tensión de CO_{600V}.

2. Selección de las funciones

Con las teclas +/- se selecciona el menú correspondiente que "hojea" con la tecla azul.

3- Conmutar entre funcionamiento Servicio y TV

En el MODO SERVICIO las funciones de televisión normales no pueden operarse. Si se necesitan estas en MODO SERVICIO (p.ej., cambio de programa), con la tecla (TV) puede conmutarse a la operación TV normal. Pulsando la tecla azul se vuelve al MODO SERVICIO.

4. Ajuste de la función elegida y almacenamiento

El valor momentáneo de la función elegida es indicado de modo hexadecimal a la derecha, al lado de la posición a ajustar, y puede cambiarse con la tecla + o bien - en el mando a distancia. Los cambios del menú respectivo pueden almacenarse bajo MEMO con la tecla + o bien anular bajo RESTORE.

En el P₁₀ de menú ROM se pueden cargar los valores por defecto del software. Sin embargo, son solo una aproximación basta al ajuste aun a realizar y deben usarse solo en caso de emergencia.

5_ Salir del MODO SERVICIO

Conmute el aparato a STANDBY a fin de salir del MODO SERVICIO o desconectar con el interruptor de la red.

Example

SET-UP									
Software code and configuration									
NORM	B	BD	BLD	BIL	L	I			
VT LANG	0	1	2						
- R-STO	+	MEMO	0	ROM					

Example

VIDEO		
R-DC	00-3F	23
G-DC	00-3F	24
R-DRV	00-3F	1D
G-DRV	00-3F	21
B-DRV	00-3F	1F
PEAK	(- / +)	
+ MEMO		
+ R-STORE		- ROM

Example

GEOM			
H-PHA	00-3F	26	
V-POS	00-07	02	
V-AMP 50Hz	00-3F	25	
V-AMP 60Hz	00-3F	1C	
- R-STO	+	MEMO	0 ROM

SET-UP	
NORM	Standards: B = BG PAL-SECAM L = L SECAM(F) D = DKK SECAM I = I PAL (UK / IRELAND)
VT-LANG.	Video Text Language 0: GB, D, SF, I, F, E, CZ, GB 1: PL, D, SF, I, F, YU, SZ, R 2: GB, D, SF, I, F, E, TR, GB

VIDEO		
R-DC*		 grau grey
G-DC*		 grau grey
R-DRV		 weiß white
G-DRV		 weiß white
B-DRV		 weiß white
PEAK	 CRT Pin 3,7,9 (6,8,11)	14" : 60V 15" : 70V 17" : 80V 20" : 90V 21" : 95V

GEOM		
H-PHA		
V-Pos		
V-Amp 50 Hz		
V-Amp 60 Hz		

TV configuration

T	TEXT MODULE
S	STEREO MODULE
M	MONO

- * adjust separate for PAL and SECAM
- * régler séparément pour PAL et SECAM
- * für PAL und SECAM getrennt einstellen
- * regolare separatamente per PAL e SECAM
- * ajustar separadamente para PAL y SECAM

(from Software version EM11 onward)

TABLE OF DIFFERENT VALUES - TABLE DES DIFFERENTES VALEURS •

** TX 91 TABLE

NORM		BGDKK'		BGHILL'		BGDKK'	BGHILL'
COLOUR		PS		PS		PS(NTSC VIDEO)	
ITEM	SCREEN SIZE	14"	20"	14"	20"	14"	14"
C110 C111 C112 C113 C114 C115 C136 C137 C152 C153 C154 C160 D150 D151 D152 I102 J101 J102 J103 J104 J107 J112 J113 J116 J122 JR31 JR47 Q102 R111 R133 R135 R138 R147 R150 R151 R152 R153 R154 R155 R156 R157 R120 T103 T104 T128 T130		DEL	DEL	INSERT	INSERT	DEL	INSERT
C164 JA12 J124 J125 J136 J137 JR35 JR39 R162 R170 R171 R172 T102		INSERT	INSERT	DEL	DEL	INSERT	DEL
	C162	DEL	DEL	DEL	DEL	DEL	DEL
	C166	39P	18P	18P	18P	39P	18P
	C167	6P8	2P2	2P2	2P2	6P8	2P2
	C168	6P8	2P2	2P2	2P2	6P8	2P2
	D133	STRAP	STRAP	BA282	BA282	STRAP	BA282
	D134	STRAP	STRAP	BA282	BA282	STRAP	BA282
	R104	68R	68R	180R	180R	68R	180R
	R132	18K	18K	1K	1K	18K	1K
	IV81	STV2112	STV2112	STV2112	STV2112	STV2118	STV2118
	OC82	DEL	DEL	DEL	DEL	3.58MHz	3.58MHz
	QH1	FILSW	FILSW	-	-	FILSW	-
		K7955M	K7955M	-	-	K7955M	-
	QK31	FILC	FILC	FILC	FILC	FILC	FILC
		8.5MHz	8.5MHz	8.5MHz	8.5MHz	8.5MHz	8.5MHz
	QK33	FILC	FILC	FILC	FILC	FILC	FILC
		6MHz	6MHz	6MHz	6MHz	6MHz	6MHz
J106/C138/C139		TO BE DEFINE					
R160		DR0	DR0	2K7	2K7	DR0	2K7
IR11 PM 12		BQ-TRAP	BQ-TRAP	OPEH	OPEH	BQ-TRAP	OPEH
IR11 PM 31 - R120 (SOUND SW)		OPEH	OPEH	180R	180R	OPEH	180R
D162		D161M	D161M	18A148	18A148	D161M	18A148
R174		DR0	DR0	56R0	56R0	DR0	56R0
CH01		18U0	18U0	47U0	47U0	18U0	47U0
L161		29.65MHz	29.65MHz	32.4MHz	32.4MHz	29.65MHz	32.4MHz
L163		5.6UH	5.6UH	4.7UH	4.7UH	5.6UH	4.7UH
CA87		330p	330p	470p	470p	330p	470p
CA09		330p	330p	390p	390p	330p	390p
RA23		5K8	5K8	5K8	5K8	5K8	5K8
R112		5K8	5K8	5K8	5K8	5K8	5K8
R113		5K8	5K8	5K8	5K8	5K8	5K8

** TX91 COMPONENTS MATCHING FOR FBT ACCORDING TO SCREEN
14" 15" 17" 20"&21"

SCREEN SIZE	14" (EU/TTT)	15" (TTT)	17" (EUROPE)	20" (EUROPE)	20" (EUROPE)
TUBE	CHUNG HWA	TOSHIBA	PHILIPS	POLKOLOR	POLKOLOR
TUBE REF.	370KR82-TC38	A36JAR40X01	A41EAM40X01	A48EEV13X01	A48EEV13X01
LP03	20264960	20264960	20264960	20349930	20349930
RP20	RMF R27 3W	RMF R27 3W	RMF R27 3W	RMF R22 3W	RMF R22 3W
JP06	STRAP 10MM	STRAP 10MM	-	STRAP 10MM	STRAP 10MM
JP07	-	-	STRAP-15MM	-	-
LL05	FCV-1410-E18	FCV-1410-E18	FCV-1410-E18	FCV-2010E07	203832 10 PI
LL03(LIN COIL)	LL90uH	LL90uH	LL90uH	LL58uH	LL58uH
CL04(TUN CAP)	CFS 6N5 1K6	CFS 6N5 1K6	CFS 6N3 1K6	CFS 6N3 1K6	CFS 7N6 1K6
CL18	CC 680P 2KV	CC 680P 2KV	CC 680P 2KV	CC 680P 2KV	CC 680P 2KV
CL05(S.CAP)	CFS 390N 250V	CFS 390N 250V	CFS 390N 250V	CFS 470N 250V	CFS 470N 250V
RL22	RMOF 91K 1W	RMOF 82K 1W	RMOF 91K 1W	RMOF 82K 1W	RMOF 82K 1W
RL13	RCFF 0.56R 0.5WJ	RCFF 2R7 0.5WJ	RCFF 2R7 0.5WJ	RCFF 1.5R 0.5WJ	RCFF 1.5R 0.5WJ
RL14/JL12	RCF 1R5 0.5W	RCF 2R2 0.5WJ	RCF 2R2 0.5WJ	RCF 2.2R 0.5WJ	RCF 2.2R 0.5WJ
JL07/L107	STRAP 10MM	STRAP 10MM	LF100UF	STRAP 10MM	STRAP 10MM
RF07	RMFMN 121R 1%	RMFMN 121R 1%	RMFMN 127R 1%	RMFMN 121R 1%	RMFMN 121R 1%
RF08	RMFMN 909R 1%	RMFMN 866R 1%	RMFMN 909R 1%	RMFMN 866R 1%	RMFMN 866R 1%
RF15	RCFMN 390K 0.1WJ	RCFMN 360K 0.1WJ	RCFMN 390K 0.1WJ	RCFMN 330K 0.1WJ	RCFMN 330K 0.1WJ
CRT(INTEGRATED)	7 TR VERSION	7 TR VERSION	IC VERSION	IC VERSION	IC VERSION
MAIN PCB (A900)	2026155A	2026155A	2035015A	2035015A	2035015A
UB MIN BEAM CURRENT	+109V	+110V	+112V	+115V	+116V
JP12/LP05	STRAP 10mm	STRAP 10mm	STRAP 10mm	STRAP 10mm	STRAP 10mm
CF05	CE1000UF	CE680UF	CE680UF	CE1000UF	CE1000UF
RL12	RCFF 0.56R	RCFF 1R5	RCFF 1R5	RCFF 0.56R	RCFF 0.56R
DP21	IS1834	IS1834	IS1834	PFR852	PFR852
CL08	CPM 6N8 100V	CPN 6N8 100V	CPN 6N8 100V	CPN 8N2 107V	CPN 8N2 100V
RL08	RMOF 33R 1W	RMOF 33R 1W	RMOF 33R 1W	RMOF 18R 1W	RMOF 18R 1W

TABLE OF DIFFERENT VALUES - TABLE DES DIFFERENTES VALEURS •

** TX 91 TABLE

NORM	BGDK1	BGHILL	BGDKK'	BGHILL'
COLOUR	PS	PS	PS(NTSC VIDEO)	
SCREEN SIZE	14"	20"	14"	20"
CR01				
CH08/CH14/CV08/CH16/CK04/CH17				
CA20/CA21/RI17/L104				
LV07				
CK07/CK08/CK09/CK10				
TX BOARD				
STEREO MODULE	OPTION STEREO MODEL TOCOM : 20420578	NICAM/STEREO TOCOM : 20335240		
BA04/JA05				
BT01/BI1A	20174620	0174650	20174620	20174620
CR19/CR20/CR22				
BR01				
BR08				
CA20 CA21 CC21 CC23 RC23 CF01 NF02				
RR69				
RR72				
RT66 RT76 CT56 CT66 CT76				
BR09				
DR06 JR59 JA25 RA07 TA04 TA05 DA04 DA05 CA14 CA08				
DK01				
CP10				
BR07, RR08				
RV25				
LP01, JP08, JP11				
RI17/L104				

DIFFERENCE BETWEEN PSN BGDKK', PAL BG AND PAL I

PSN BGDKK' (NTSC VIDEO)	PAL BG (NTSC VIDEO)	PAL I (NTSC VIDEO)
POS	DESCRIPTION	STRUCTURED NAME
CI63	CCMIN INF 50VK	RCFMN 0 OHM
CI64	CCMIN 4N7 16V M	DELETED
CI65	CCMIN 47P0 50VJ	DELETED
CI66	CCMIN 39P0 50VJ	DELETED
CI67	CCMIN 6P8 50VK	DELETED
CI68	CCMIN 6P8 50VK	DELETED
DI33	STRAP 0.6X4.5X12.5	DELETED
DI34	STRAP 0.6X4.5X12.5	STRAP 0.6X4.5X12.5
DI60	DIODE BA282	DELETED
LI61	LA7X7 29.65MHz	DELETED
QI01	FILSW K2955M	FILSW G1962M
QI31	FILC 6.5MHz	DELETED
QI32	FILC 5.5MHz	FILC 5.5MHz
QI33	FILC 6.5MHz	DELETED
QI34	FILCTRP 5M74	FILCTRP 5M74
RI04	RCFMN 68R 0.1WJ	RCFMN 0 OHM
RI27	RCFMN 68R 0.1WJ	RCFMN 56R 0.1WJ
RI60	RCFMN OR	DELETED
RI62	RCFMN 2K7R 0.1WJ	DELETED
RI63	RCFMN 150KR 0.1WJ	DELETED
RI70	RCFMN 2K7R 0.1WJ	DELETED
RI71	RCFMN 2K7R 0.1WJ	DELETED
RI72	RCFMN 3K9R 0.1WJ	DELETED
TI02	SMD BC848B	DELETED
JA12	STRAP 0.6X4.5X10	DELETED
JR39	RCFMN 0 OHM	DELETED

MICROPROCESSOR

RF NORM / SOUND	L,AM	BG,FM5.5	I,FM6.0	DKK',FM6.5
PIN 12 (BG TRAP)	0	1	0	0
PIN 31 (SOUND SW)	1	1	0	1

DIFFERENCE BETWEEN MONO & STEREO 20" (BGHILL')

POS.	MONO	STEREO	POS.	MONO	STEREO	POS.	MONO	STEREO	POS.	MONO	STEREO
BA03	2 WAY	DEL	CI70	33P	DEL	JA24	12.5MM	10R0	RI17	DEL	2K7
BA05	DEL	7 WAY	CI71	1N	DEL	JA25	12.5MM	DEL	RI27	100R	110R
BA06	DEL	9 WAY				JA38	DEL	0R	RI32	1K	DEL
CA02	470U	DEL				JI12	12.5MM	DEL	RI33	1K8	DEL
CA03	100N	DEL				JI13	12.5MM	DEL	RI35	4K7	DEL
CA04	1U	DEL	DA04	BZX55B2V7	DEL	JI16	10MM	DEL	RI38	1K8	DEL
CA05	22N	DEL	DA05	BZX55B2V7	DEL	JR22	DEL	0R	RI47	4K7	DEL
CA06	22N	DEL	DI33	E7296	DEL	JR35	DEL	0R	RR20	100R	DEL
CA07	150P	DEL	DI34	E7296	DEL				RR72	1K8	DEL
CA08	2N2	DEL				LI04	DEL	22U	TA04	BC848B	DEL
CA09	150P	DEL	IR01	ST9291J6B1	ST92E11J7	LI62	12V	DEL	TA05	BC848B	DEL
CA13	47U	DEL				LI63	4U7	SU6	TI30	DTC144EK	DEL
CA14	220U	DEL	QI01	G1965M	IFWG3965M	NA01	IC-MONO	DEL			
CA15	47U	DEL	QI32	5.5MHz	DEL						
CA16	220N	DEL	QI33	6MHz	DEL	RA07	2K2	DEL			
CA17	4N7	DEL				RA08	56K	DEL			
CA39	470U	DEL				RA09	4K7	DEL			
CI14	10U	DEL	JA01	DEL	0R	RA10	56K	DEL			
CI15	10U	DEL	JA04	0R	DEL	RA11	10K	DEL			
CI16	22U	DEL	JA07	10MM	DEL	RA21	150K	DEL			
CI17	22U	DEL	JA08	DEL	12.5MM	RA22	220K	DEL			
CI19	68N	DEL	JA10	DEL	10MM	RA23	2K7	DEL			
CI22	1U	DEL	JA11	DEL	10MM	RA24	47R	DEL			
CI23	CCCMIN 22N	RCFMN 0R	JA15	10MM	DEL	RA25	1R	DEL			
CI24	22N	DEL	JA17	0R	DEL	RA26	470R	DEL			
CI31	330	DEL	JA20	12.5MM	DEL	RI12	5K6	DEL			
CI36	22N	DEL	JA21	DEL	10MM	RI13	5K6	DEL			
CI37	22N	DEL	JA22	DEL	10MM	RI14	220R	DEL			
						RI15	100K	DEL			

^ BRAND

	PIN9	PIN8
TELEFUNKEN	0	1
BRANDT / SABA / FERGUSON	1	0
THOMSON / NMD	1	1

≠ CRT IC VERSION

	14"	17"	20"	21"
RT06	62R	62R	220R	220R
CT06, RT10 RT26, RT46	TO BE DEFINE			

@ VOLTAGE FOR CRT

14"	20"	21"
160V	180V	180V

Solder side - Cote soudure - Lotseite - Lato saldature - Lado soldaduras

[illegible]

ABL	AVARAGE BEAM LIMITATION REGULATION DU SOURANT DE FAISCEAU
AF	AUDIO FREQUENCY FREQUENCE AUDIO
BCL	BEAM CURRENT LIMITATION LIMITATION DU COURANT DE FAISCEAU
DEG. COIL	DEGAUSSING COIL BOBINE DE DEMAGNETISATION
FB	FAST BLANKING COMMUTATION RAPIDE
H	HORIZONTAL DEFLECTION SIGNAL SIGNAL DE COMMANDE BALAYAGE HORIZONTAL
HTR	HEATER TENSION DE FILAMENT
I CUT	CUTOFF CURRENT COURANT DE CUTOFF
IP	DATA FROM INFRARED RECEIVER DONNEES ISSUES DU RECEPTEUR INFRAROUGE
SCL	SERIAL CLOCK SIGNAL HORLOGE SERIE
SDA	SERIAL DATA DONNEE SERIE
SIF	SOUND IF FISON
VAMP	VERTICAL AMPLITUDE AMPLITUDE VERTICALE
V POS	VERTICAL POSITION POSITION VERTICALE ,
VT	TUNING VOLTAGE TENSION DU TUNER
-V	VERTICAL DEFLECTION SIGNAL SIGNAL DE COMMANDE BALAYAGE VERTICAL

Ersatzteile • Spare parts list • Liste de pieces de rechange • Lista parti di ricambio Lista de piezas de recambio

Wichtig: Bei Ersatzteilbestellungen bitte unbedingt die entsprechende Bestellnummer angeben!
N. B.: When demanding Spare Parts it is absolutely necessary to quote the corresponding part number!
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Importante: Ordinare sempre con il numero corrispondenti di codice!
Importante: Pedir siempre los recambios con el numero correspondiente **codigo!**

Pos.	Art.-Nr. Part No.	Bezeichnung	Part	Pos."	Art.-Nr. Part No.	Bezeichnung	Part
MTM4045	202.413.WI	MOOULE/AUSTAUSCHTEILE: MTM4045 TUNER	EXCHANGE PARTS: MTM404S TUNER	DP09	309.325.927	1N4141 DiOd*	1N414«04od»
BA01	231.0—	CHASSIS-TE1LE Sinnsf 2poitg. UP	CHASSIS PARTS	DP10	309.325.927	1N4146 D>od*	1N4148 Diode
BE01	3m.6St.001	ScartbuchrZlpokg	2 pin contact houaing	DP11	309.325.951	1N4001 D>od*	1N4001 Diode
BT01	201.746.20	BikjronrHhung	Caitiod* ray tub* sockt	DP12	309.325.951	1N4001 Diode	1N4001 Diode
BT01	353.902.1000	BildroDraxung	Carnoda fty lub« lock*1	OP13	309.325.951	1N4001 Diode	1N4001 Diode
BT02	905.903.50	Stilleiste lOpolig RD UF	Contxtc strip 10-pol*	DP20	490.007.6951	BYT13-800 Dtpd*	BYT 13-800 Diod*
BV01	309.650.064	Stittitrii lOpolig UF	Confct striki l0*pol«	DP21	204.037.70	BYT52G Diode	BYT52G Diode
BV02	905.903.50	S(it11«rt» lOpolig RD UF	Conud «trik» 10-pol*	DP21	490.006.0461	PFR852 D.od«	PFR852 Diode
BV03	309.650.092	Stittit«iat*. 4polk) Li*g'nd	ConUct lriip. 4-pol*	DP22	204.037.70	BYT52G D.ode	9YT52G Diode
BX01	309.650.087	Stittit«isle, lQpOHg. Natuf U	Contact strik). 10-pot*	DR04	464.358	ZPD0.2 0.5W 2-Diode	ZPD8.2 0.5W Z-OiOd*
CH12	490.006.0607	10NF 250V 20% Keramik-Konden««tor	10NP 250V 20% Ccap	OR0S	309325.927	1N4149 Diode	1N4148 Diode
CL04	101.857.70	ON3F 1K6V 3.5% Filmkond*ne«tor	6N3F 1K6V 3.5% Film e«p	OR06	309.325.927	1N4146 OiOd*	1N4148 DiOd*
CL04	256.909	7N6F 1K6V 3.5% Filmkondwtof	7N6F 1K6V 3.5% Film C«P	DT0t	464.358	ZPDB.2 0.5W Z-Olod*	ZPD8.20.5WZ-O.Od*
CL04	490.007.6232	7NOF 1K5V3.5% Filmkondensel	7NOF 1K5V 3.5% Film Clp	OT21	309.325.927	1N4148 Diode	1N4148 Diode
CL05	309.433.766	390NF 250V 10% MKP-Kondenflor	39CNF 250V 10% Film cap	OT22	309325.927	1N4148 D«od«	1N4148 Diode
CLIO	266.243	330PF 1KV 10% Kenmik-Kondanutor	33CPF 1KV 10% Cop	DT23	464.879	BAV21 Diode	BAV21 Diode
CL12	490.006.0607	10NF 250V 20% K«fmik-Kond«n»itor	10NF 250V 20% Cctp	DT41	309.325.927	1N4148 Diode	1N4148 Diode
CL15	266.243	330PF 1KV 10% Keremik-Konden—tor	33CPF 1KV 10% C Clp	DT42	309.325.927	1N4140 Diode	1N4148 Diode
CL17	243879	330PF 400V 20% Kefamik-Kondensator	330*F 400V 20% C cap	OT43	464.879	BAV21 Diod*	BAV21 Diode
CL18	242272	680PF 2KV 10% K*ramik-Kond*ns«lor	66CPF 2KV 10% C cap	DT50	309.325.927	1N414aOode	1N4148 Diode
CP01	252320	OU1F 27SV20%MP-Kono*n«tor	OU1F 275V 20% MPoly cap	OT81	462.299	BAV21 Diode	BAV21 Diode
CP04	203.867.60	1NF 1KV 10% K*ramik-Kond*n«tor	1NF 1KV 10% Ccap	OT82	309325.927	1N4148 D«da	1N4148 Diode
CP05	309.442.972	1NSF 1KV K«ramik-KondTT«tOf	1NSF 1KV Ccap	DT60	309.325.927	1N4148 Diode	1N4148 DiOd*
CP06	309.440.660	1NF 1KV 50% KerTDik-Kondensator	1NF KV 50% C cap	OT6	309.325.927	1N414a Diode	1N4148 OiOd*
CP07	490.007.2242	100UF 400V Elko	100UF 400V E cap	OT61	462.299	SAV21 Diode	BAV21 Diode
CP09	203.687.60	1NF 1KV 10% Ker«mik-Konden««tor	1NF 1KV 10% C cap	OT62	309.325.927	1N4148 Diode	1N4148 Diode
CPU	243.879	330PF 400V 20% K*«mik-Kondenietor	330PF 400V 20% Ccap	DT63	464.679	BAV21 Diode	BAV21 Diode
CP16	309.440.660	1NF 1KV 50% K*«mik-Kondensil«or	1NF 1KV 50% C cap	OT70	309.325.927	1N4148 Diode	1N4148 Diode
CP21	101.09960	4N7F 400V 20% Ker«mik-KondensHor	4N7F 400V 20% C cap	DT71	462.299	BAV21 Diode	BAV21 Diode
CP21	309.951.997	Schutzkappe P.CP21/49/50	Profclion cap	OT72	309.325.927	1N4148 Diode	1N4148 Diode
CP29	490.006.0601	270PF 2KV 10% Kef-mik-Kondensitof	27CPF2KV10% Ccap	DT65	464.358	ZPDB.2 0.5W Z-DiodW	ZPDB.2 0.5W Z-Dktid*
CP35	266.243	330PF 1KV 10% KerTHik-Konden—lor	330PF 1KV 10% C cap	DT66	309.325.927	1N4148 DiOd*	1N4146 DiOd*
CP36	309.419.426	150UF 200V Elto	150UF 200V E cap	DV01	309.325.927	1N4148 D>Od»	1N4148 Diode
CP40	243.879	330PF 400V 20% K*«mik-Kond*nutor	330PF 400V 20% Ccap	OV02	309.325.927	1N4148 Diode	1N4148 Diode
CT03	140.360.20	2N2F 2KV 50% K*rimikKond*n«tor	2N2P 2KV 50% C cap	OV03	309.325.927	1N4148 Diode	1N4148 Diode
CT82	246.746	2U2F 250V Elko	2U2F 250V E cap	OV04	309.325.127	BZX55B8V2Z-D>00*	BZX55B8V2 Z-Diod*
CT«4	238.221	10NF 250VAC 400V Kenmik-Kondensetof	10NF C cap	OX01	309.325.927	1N4148 Diode	1N4148 Diode
CT85	309.442.978	1NF2KV20%KTBrnik-Kondensator	1NF2KV20«CC«P	OX04	309.325.927	1N4148 D'OoIl	1N4146 DiOd*
DA05	3M.12f.111	BZX55B2V7 Z-DiOd*	BZX55B2V7 Z.Dioda	FP01	309.627.506	1.6AT Sicherung	1.6AT FUM
DC01	464.371	ZPD5.1 Z-DKkt	2PD5.1 Z-Olod*	IA01	202.031.20	TDA7253 1C	TOA725S 1C
DFOt	309.325.951	1N4001 OiOd*	1N4001 DiOKK	IA01	202.992.40	Morrfgectip	Chp
OF02	309.325.927	1N4148 Diode	1N414«010«1«	IC01	203.357.50	TDA4685 1C	TDA4MS 1C
OF21	309.325.927	1N4148 DiOd*	1N4141 DiOdM	IF01	309.368.733	TDA1771 1C	TDA1771 1C
OF22	309.325.927	1N4148 OiOd*	1N4148 DiOd*	IF01	309.903.644	Montagecltp	Clip m*tl
OH01	353.111.2001	ZTK33C 1C	ZTK33C 1C	1101	201.eS2.80	STV224A 1C	STV8224A 1C
OK01	202.185.20	LTL-4263 OiOd* LED rot	LTL-4263 Dioca LED r«d	IK01	101.324.10	TFMK1330T 1C IR-Vorvrefrkf	TFMK1330T 1C
DK01	239.018	Hairr. LED	LED licoldil	IP01	309.368549	TEA2261 1C	TEA2261 1C
OK03	202.985.20	LTL-4263 DiOd* LEO rot	LTL-4283 Diode LEO lad	IR01	203.735.40	ST9291J6B11C prog. o. S.	ST9291J6B1 1C
MK03	203.820.60	H-litr LED	LED ncolil	IB01	251.230.90	ST9291J6B1 1C prog. m. S.	ST9291J6B1 1C
OL01	309.325.927	1N4146 DiOd*	1N4i4goioid«	IR01	309.669966	IC-Fllssung 42polig	(C socket 42pol*
DL02	204.037.70	BYT52G DiOd*	BYT520 DiOd*	IR02	309368734	TDA8139 1C	TDA81391C
DL04	204.037.70	BYT52G DiOd*	BrT52G Diode	IR02	309.903.644	Montageclip	Clip melal
OL05	204.037.70	BYT52G DiOd*	BVT52G Diode	IR03	243.022	IC-Faassung flpolig	1C socket 8pol*
DL07	309.325.951	8YT52G OiOd*	BrT52Q Diode	IR03	490.008.0379	X24C04 1C	X24C041C
DL08	309.325.951	1N4001 DiOd*	1N4001 Diode	1T01	202.992.40	Montgeclip	Chp
DL09	309.325.951	1N4001 DiOd*	1N4001 Diode	IT01	309.36f.606	TEA5101AIC	TEA5101A 1C
DL12	309.325.927	1N4148 Diode	1N4146 Diode	IV01	201.656.10	STV21181C	STV21181C
DL13	243.375	BZX55B13V Z-Diode	BZX55B13V Z-OK3da	IV01	309.669.966	IC-Fassung 4,00«tg	1C socket42pol*
DL20	309.325.927	1N4148 DiOd*	1N4148D.OO*	1X01	203.061.50	CF70204 1C	CF70204 1C
0121	309.325.927	1N41480K)id*	1N4146 OiOd*	1X02	203.061.60	CP72306 1C	CF72306 1C
DL23	309.325.927	1N414a DiOd*	1N4148 Diode	1X03	309.368.470	UA7805CSP 1C	UA7805CSP 1C
DP01	102.661.30	M100M DiOd*	M100M OWH	LH01	339349512	47UH Drosiel	47UH RP choke coil
DP02	102.661.30	M100M DiOd*	M100M DiOd*	LH02	339349512	47UH Dfooeel	47UH RF choke coil
DP03	102.661.30	M100M DiOd*	M100U Diode	LI01	309.250.968	OU56H Orotsei	OU56H RF choke00)1
DP04	102.661.30	M100M DiOd*	M100U Diode	LI03	266.716	22UM Oroasel	22UH Choke
DP08	490.001.1567	BYT 11-600 OiOd*	BYT 11-600 Diode	LI20	150.401.10	3U3H 10% Dros«*l	3U3H 10% Chok*Coil
DPW	204.037.70	BYT52Q DiOd*	BYT52G Diode	LI29	203.109.30	38M9HZ Fillef LA7x7	38M9HZ Filter
OP07	204.037.70	BYT52G DiOd*	BYT52Q DiOd*	LI62	004.710.3676	12UH 10% DfdilJ	12UH 10% Choke coil
DPO»	204.037.70	BYT920 DiOd*	BYT 520 DiOd*	L163	130.206.00	5U6H 10% Orossel	5U6H 10% Choke coil
				LLOI	243.866	Tteibertnifolm.Hof	H-Drivr transformer
				LL03	309.249.377	S8UH Spul*. H-Limritkt	58UH H-Linearity coll

Ersatzteile • Spare parts list • Liste de pieces de rechange • Lista parti di ricambio Lista de piezas de recambio

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Pos.	Art.-Nr. Part No.	Bezeichnung	Part	Pos~	Art.-Nr. Part No.	Bezeichnung	Part
MTM4045	202.483.90	MODULE/AUSTAUSCHTEILE:	EXCHANGE PARTS:	DP09	30932S.927	1N4148 DiOd*	1N4148D100*
		MTM4045 TUNER	MTM4045 TUNER	DP10	309.325.927	1N4148 DiOd*	1N4148 DiOd*
				OP11	309.325.951	1N4001 DiOd*	1N4001 Diode
				OP12	309.325.951	1N4001 Diode	1N4001 Diode
				DP13	309.325.951	1N4001 DiOde	1N4001 Diode
				OP20	490.007.6951	BYT13-800 DiOd*	BYT13-800 DiOd*
BA01	21>.OM	Stiftfrrr ipolig. UP	2 pin contact flouting	DP21	204.037.70	BYT52G DiOd*	BYT52G Diode
BE01	309*51 001	Scartbichse21polfg	Scan *ocke(DP21	490.008.0461	PFR852 Diada	PFR852 Diode
BT01	201.746.20	Bikronfassung	Cathode ray tub* sockt	OP22	204.037.70	BYT52G DiOO*	BYT52G Diode
BT01	353.902.1000	Bildrohrfassung	Ca-noae riy tube >ock<l				
BT02	905.903.50	Simi*ist IQpoliffi RD UF	Concrct *trip 10-pol*				
BV01	309.650.0e4	StilUeisle iPolig UF	Contact itrip 10-por	DR04	464.358	ZPD8.2 0.5W Z-Diod*	ZPD8.2 0.5W Z-DiOd*
BV02	90S.903.50	Stiftlierte iPolig RD UF	Confci *trip 10-pol*	DB05	309.325.927	1N4148 DiOd*	1N4148 DiOd*
BV03	309.950.092	Stiftl*1f. 4polig Uegend	Contact atrip, 4-pol*	OR06	309.325.927	1N4148 DiOd*	1N4148 Diode
8X01	309.650.087	Stiftleiele. iOpohg. NaturU	Contact *trip, 10-pot<	DT01	464.358	ZPD8.2 0.5W Z-DiOd*	ZPD8.2 0.5WZ-DiOd*
CH12	490.008.0607	10NF 250V 20% K*ramik-Kond*naator	10NF 250V 20% C cap	OT21	30932S.927	1N4148 D>Od*	1N4148 DiOd*
CL04	101.657.70	6N3F 1K6V 3.5% Filmkondenaator	6N3F 1K6V 3.5% Film c>p	OT22	309.325.927	1N4148 D<Od*	1N4148 Diode
CL04	258.909	7N6F 1K6V 3.5% FilmkondenaatOf	7N6F 1K6V 3.5% Film dp	DT23	464.879	BAV21 D>od*	BAV21 Diode
CL04	490.007.8232		7NOF 1K5V 3.5% Film cap	DT41	309.325.927	1N4148 Diode	1N4148 Diode
CL05	309.433.786	390NF 250V 10% MKP-Kond*n<ator	39CNF250V 10%Fitmc<p	DT42	309.325.927	1N4148 DiOd*	1N4148 Diode
CL05	309433.775	470NF 250V 5% MKP-KondenaaiOf	47CNP 250V 5% Capacitor	OT43	464.879	BAV21 DiOd*	BAV21 Diode
CL10				DT50	309.325 927	1N4148 DiOd*	1N4148 Diode
CL12	490008.0607	10NF 250V 20% Keramik-Kondensator	10NF 250V 20% Ccap	OT51	462.299	BAV21 DiOd*	BAV21 Diode
CH15	266.243	330PF 1KV 10% Keramik-Kond*nutor	33CPF 1KV 10% C cap	DT52	309.325.927	1N4146 D<oda	1N4148 Diode
CL17	243.879	330PF 400V 20% Karamik-Kondensator	330PF 400V 20% C cap	DT60	309.325.927	1N4148 Diode	1N4148 Diode
CL17	242.272	6BOFF 2KV 10% K*ramik-Kond*nsator	66CPF 2KV 10% C cap	DT6<	309.325.927	1N4148 DiOde	1N4148 Diode
CPOI	252.120	OU1F 276V 20% MP-Kond*n—tor	OUF 275V 20% MPoty cap	OT61	462.299	8AV21 Diode	BAV21 Diode
CP04	203.887.60	1NF 1KV 10% K*ramik-Kondenaator	1NP 1KV 10% C cap	OT62	309.325.927	1N4146 Diode	1N4148 Diode
			1NSP 1KV Ccap	DT63	464.679	BAV21 DiOd*	BAV21 Diode
CP06	309.440.680			DT70	309.325.927	1N4148Diode	1N4148 Diode
CP07	490.007.2242	100UF 400V Elho	100UF 400V E cap	OT71	462.299	BAV21 Diode	BAV21 Diode
CP08	203.867.80	1NF 1KV 10% Kef<mik-Konden>*tOf	1NF 1KV 10% C cap	OT72	309.325.927	1N4148 Diode	1N4148 Diode
CPU	243.679	330PF 400V 20% Ker*(nik-Konden*alor	330PF 400V 20% Ccap	DT85	464.358	ZPD8.2 0.5W Z-Diod*	ZP09.20.5WZ-DiOd*
CP16	309.440.660	1NF 1KV 50%Kefmtk-Kondenaator	1NF 1KV 50% C cap	DT86	309.325.927	1N4148DiOd*	1N4148 Diode
CP21	101.09980	4N7F 400V 20% Kefmik-Kondenattor	4N7F 400V 20% Ccap	DV01	309.325.927	1N4148 Diode	1N4148 Diode
CP21			Profcton cap	DV02	309.325.927	1N4148 Diode	1N4148 Diode
CP29	490.008.0601	270PF 2KV 10% Kfamik-Kondansator	27CPP2KV10% Ccap	OV03	309.325.927	1N4148 Diode	1N4148 DiOde
CP35	266.243	330PF 1KV 10% K*ramik-Kond*naator	330PP 1KV 10% C cap	DV04	309.325.127	BZX5568V; Z.D.od*	BZX55B8V2 2-Dode
CP36	309.419.428	150UP 200V Eiko	1SOUF 200V E cap	OX01	309.325-927	1N4148D.ode	1N4148 Diode
CP40	243.679	330PF 400V 20% K*famik-Kond<n—tor	330PP 400V 20% C cap	OX02	309.325.927	1N4148 Diode	1N4148 Diode
CT03	140.360.20	2N2F 2KV 50% Kftramik-KondTrator	2N2F 2KV 50% Ccap	OX03	309.325 927	1N4148 DiOde	1N4148 Diode
CT82	248.746	2U2F 250V Eiko	2U2F 250V E cap	OX04	309.325-927	1N4148 Diode	1N4146 Diode
CT84	23(221	10NF 250VAC 400V Keramik-Kondensator	10NF C cap	FP01	309627.508	1.6AT SchTung	1.6ATFuee
CT85	309.442.978	1NF 2KV20% Keramik-Kondenaator	1NF2KV20>CC<p	IA01	202.031.20	TDA72531C	TDA72S31C
DA05	31M.32i.UI	BZX55B2V7 ZChod*	8ZX5SB2V7 Z-Ooda	IA01	202.992.40	Monlagedclip	Chp
OC01	464371	ZPD5.1 Z-Diod*	ZPD5.1 Z-DiodW	IC01	203.357.50	TDA46651C	TOA46651C
DFOI	309.325.951	1N4001 DiOd*	1N4001 DiOd*	IF01	309.368.733	TDA1771 1C	TOA177t 1C
DF02	309.325.927	1N4148 DiOd*	1N4148 DiOd*	IF01	309.903.844	Montag*clip	Clip mfl
DF21	309.325.927	1N4148 DiOd*	1N4149 DiOd*	1101	201.ef2.10	STVB224A 1C	STVB224A 1C
DF22	309.325.927	1N4148 DiOd*	1N4148 DiOd*	IK01	101.324.10	TFMK1330T 1C IH-VorvratBrker	TFMK1330T 1C
OH01	353.111.2001	ZTK33C 1C	ZTK33C 1C	IP01	309.368.549	TEA22611C	TEA22611C
DK01	202.9(6.20	LTL-4263 Diode LED rot	LTL-4263 DiOd* LEO r*d	IR01	203.735.40	ST9291J6B1 1C prog.0. S.	ST9291J6B1 1C
DK01	239.018	Halter. LED	LEO moldw	IR0t	251.230.90	ST9291J6B1 1C prog. m. S.	ST9291J6B1 1C
DK03	202.966.20	LTL-4263 DiOd* LED rot	LTL-4263 DiOd* LED r>d	IR01	309.689 966	IC-Fassung 42oolig	(C socket 42pol*
MK03	203.820.60	Halfr LEO	LEO holdw	IR02	309.368 734	TD A81391C	TD A81391C
DL01	309.325.927	1N4148DiOd*	1N4148 DiOd*	IR02	309.903.844	Montageclip	Clip metal
DL02	204.037.70	BYT52Q DiOd*	BYTS2G DiOd*	IR03	243.022	IC-Fassung Bpolig	1C socket 8pol*
DL04	204.037.70	BYT52G DiOd*	BYTS2Q DiOd*	IR03	490.0080379	X24C041C	X24C041C
DL0t	204.037.70	8YT52G DiOd*	BYTS2G DiOd*	IT01	202.992.40	Monlagedclip	Clip
0106	204.037.70	BYT52G DiOd*	B<T52G DiOd*	IT01	309368606	TEA5101AIC	TEA5101A IC
DL07	309.325.951	1N4001 DiOd*	1N4001 DiOd*	IV01	201 658 10	STV21181C	STV21181C
DL06	309.325.951	1N4001 DiOd*	1N4001 DiOd*	IV01	309.689 966	IC-Fassung 42ooltg	1C socket42por
DL12	309.325.927	1N4148 Diada	1N4148 DiOd*	1X01	203.061.50	CP70204 1C	CF70204 1C
DL13	243.375	BZX55B13VZ.Diod*	BZXSSB13VZ-Diod*	1X02	203.061.60	CP72306 1C	CF72306 1C
01-20	309.325.927	1N4148 Diode	1N4148 DiOd*	1X03	309.368.470	UA7805CSP/MC7M5 1C	UA7605CSP 1C
OL21	309.325.927	1N4148 DiOd*	1N4146 DiOd*	LM01	339.349.512	47UH Dro*—I	47UH RF chok* COIL
DL23	309.325.927	1N4148 DiOd*	1 N4148D100*	LH02	339 349 512	47UH DiOtael	47UH RF Chok* COIL
DP01	102.661.30	M100M DiOd*	M100M DiOd*	LI01	309.250 988	0(J56H Drossef	OU56H RF chok* 60U
OP02	102.661.30	M100M DiOd*	M100M DiOd*	LI03	266716	22UH Diossel	22UM Choke
DP03	102.661-30	M100M DiOd*	M100M DiOd*	L120	150.401-10	3U3H 10% Dror*1	3U3H 10% Chok* coil
DP04	102.661.30	M100M DiOd*	M100M DiOd*	L129	203.109.30	36U9HZ Filfr LA717	38M9HZ Fi**r
OP0>	490.001.1567	BYT11-600 DiOd4	BYTI 1-600 DiOd*	L162	004.710.3876	12UH 10% Drosa*)	12UH 10% Cfiok* coil
DFPM	204.037.70	BYT52G DiOd*	BrT52G DiOd*	L163	130.206.00	SU6H 10% Drosael	5U6H 10% Chok* coil
OP07	204.037.70	6YT52G DiOd*	BYT52G DiOd*	LL01	243.888	Treibertranxfomator	M-Driver transformer
OPW	204.037.70	BYT52Q DiOd*	BYTS2Q DiOd*	11.03	309.249.377	5BUH SDu*. H-Lirrarift	58UH H-Linealfly coil

Ersatzteile • Spare parts list • Liste de pieces de rechange • Lista parti di ricambio

Lista de piezas de recambio

Wichtig: Bei Ersatzteilbestellungen bitte unbedingt die entsprechende Bestellnummer angeben!

N. B.: When demanding Spare Parts it is absolutely necessary to quote the corresponding part number!

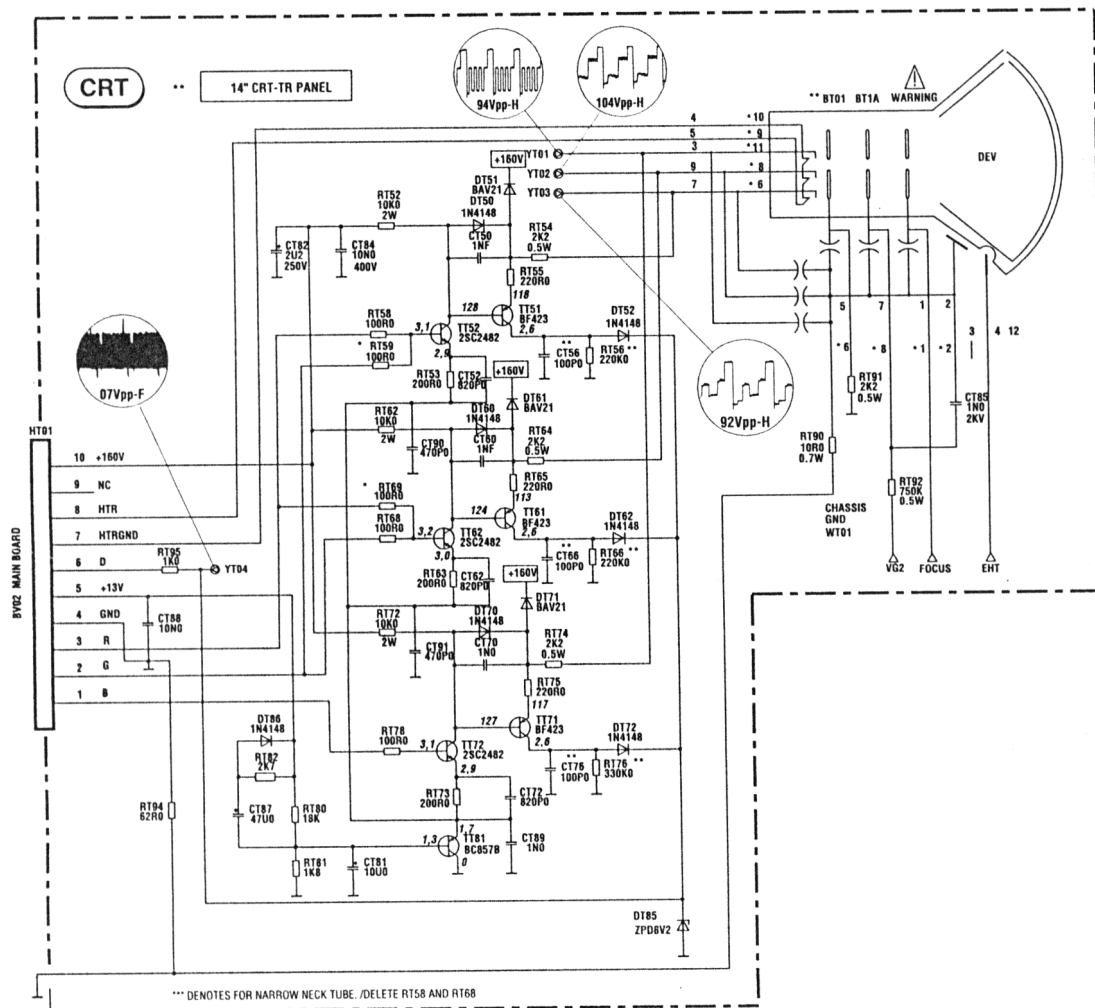
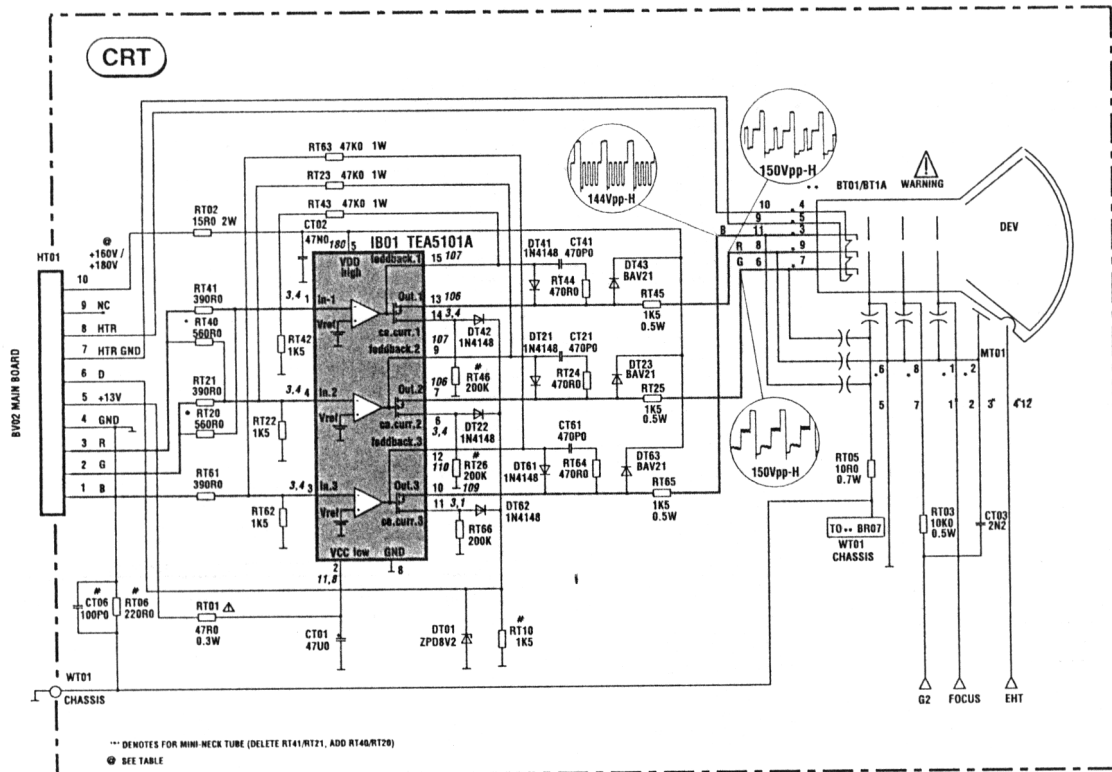
Important: Lors d'une commande de pieces de rechange, priere d'indiquer et tout cas le numero de la piece!

Importante: Ordinare sempre con il numero corrispondenti di codice!

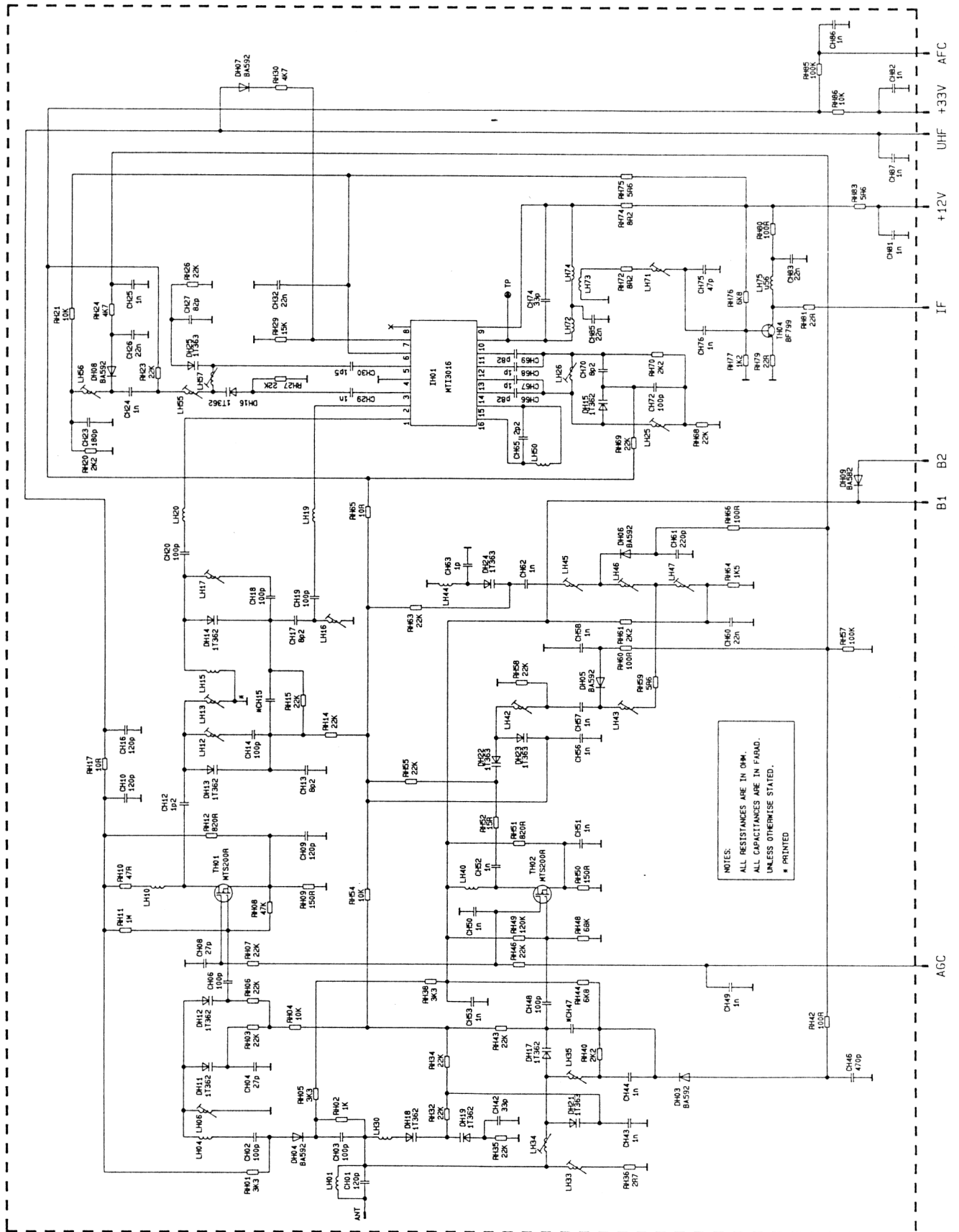
Importante: Pedir siempre los recambios con el numero correspondiente codigo!

Pos.	Art.-Nr. Part No.	Bezeichnung	Part	Pos.	Art.-Nr. Part No.	Bezeichnung	Part
LL03	490.007.8459	90UH Spule H-Lirwaht	SOUH H-Linearity coil	RT01	253.081 S	47R 0.3W StCherh cits wider stand	47R 0.3W Fusible resistor
LL04	309.250984	50UH 1 5% Oroirfl	50UH 15% Choke	RT02	130.013.50	15R 2W 5% Meftloxydwiderstand	15R 2W 5% Motal oxide resistor
LL05	20202880 I	Diodenapil-Trafo TX91 14' FCV-1410E18	Diode split transtoftTTf	RT03	404.349.80	10K0.5W5%W«afsiانو	10K 0.5W 5% Resistor agglom.
LL05	203.832 80 *	OiOdeffspil-Trafo TX91 20"	Diodfl split tranforTiM	RT23	101.337.80		
LLOS	251.233.40 S	D>od«nspilH.TrafoTX91 20' FCV-2010E07	Diod* split Irinistormw	RT25	101.218.80	1K5R 0.5W 5% Widersfnd	1 K5R 0.5W 5% Resisor affilflom.
				RT43	101.337.60		
LPOJ	339 349.566 I	2X4QOUH NBZeingangUro—!t	2X400UH Poww chok«	RT45	101.218.80	1K5R 0.5W 5% Widersund	1 K5R 0.5W 5% Resistor aoglom.
LP02	203 979.40	30MH Siebarosssel	30MH Piller choke	RT52	490007.8228	10KR2W 10% Melailoxyaw.dersfnd	10KR 2W 10% Metal oxide resistor
LP02	490.0060542	33MOH Stftbdrossel	Pilfr choke	RT62	490 007.8228	10KR2W 10% MeffloxydwidelSiand	10KR 2W 10% Metal oxide resistor
LP03	203774.10 S	Trafo Schaltnetzfl	Swiicftfld mode power (rinxformw	RT63	101-337.80	47KR 1W 5% M«flkixy0w>derstand	47KR iw 5% Metal oxide resistor
LP03	203.425.90 E	Trafo SchaHnetzteil ETS42A2-116ND	Switcfrld 'nod* power tfinitormw	RT65	101.218.80	1K5R 0.5W 5% Widerstand	1K5R 0.5W 5% Resistor agglom.
LP04	203.264 60	2U2H 10% Drossel	2U2H IO%Chok «coil	RT72	490.007.8228	10KR 2W 10% Meulioxydwidersiand	10KR 2W 10% Metal oxide resistor
LPO*	203.264 50	4UH 10% Orossel	4UH 10% Chokacoil				
LPW	203.264.50	4UH 10% Drossel	4UH 10% Choke coil	RV02	258863 S		
LPW1	150397.50	15UH 10% Orossel	15UH 10% Choke coil	RV41	150.099.70 S	3R9 0.3W 5% SicherheitswtdTslend	3R9 0.3W 5% Fusible resistor
LR01	266406	10UM Droeiwrt	IOUHChokccoU	RX01	309.580 955 :	22R 0.3W 5% Storwh*ttwidJntend	22R Q.3W B« Fuable restor
MTOJ	402.002.00	Cineh ButctM	Cineh «ockt	SK01	105.106.00	TaKtschaner	Tact twitch
				SK01	404.474.1A	Tactschalter	Tact switch
P101	203.S13.20	10KR 30% Tnmnwider«tand (legend	10KR 30% Trimmer r—iator	SK02	105.106.00	Taktscrmier	Tact switch
PP01	309 S09.204	470R Tnmnwiderstand. liegend	470R Trimmer reirtor	SK03	105.106.00	Taktscha'ier	Tad switch
QC01	100.877.10	4M433616HZQuirz	4M433G19HZ Crystal	SK03	404.474.1A	Taktscrmier	Tad twitch
QC02	100.877.20	3M579545HZQuarz	3M579545HZ Crysfll	SK04	105.106.00	Taktecheirr	Tact twitch
				SK04	404.474.1A	Takischalter	Taci switch
0101	404.03749	OFWVG1962M Obertlachenwirlfilter	Surfac* «eoulic wv tilfr	SK0S	101.759.10 S	Neizscnalter	Mama switch
0132	278.341	SFT5.SMA Keramikfilfr	SFTS.6MA Cennic lilfr	SK0S	201.260.10 S	Netzschaltef. 4A 250V	Main« switch
0114	203.381.70	70KHZ Kenmikliliter Trap	70KHZ Certmic filter trip				
QR01	3C9.335.731	BMOHZ Quarz	8MOHZ Crytial	TA05	339.555.241	BC9488 Transistor SMD	BC848B Transistor
QV01	309.180.840	CSB503B Keramikfilfr	CS95039 CTmic mlfr	TAOC	339555.241	BC848B Transistor SMD	BC848B Tranaiator
QX01	261.323	13M875HZ Quarz	13M875HZCfyst«I	TP21	339.555241	BCS4BB Tranartor SMD	BCa4BB Transielor
				TF31	102.762.40	8C4BA Transistor	BCB4BA Transistor
				TF31	339.555.241	BC&48B Trarritor SMO	BC648B Transistor
RA25	339 537.717	1 R 0.3W 5% Sicerneltswiderstand	1 R 0,3W 5% Fusible resistor	TH01	249.0(3	BC647B Transioior SMO	BC847B Transistor
RA21	246.206 S	470R 0.3W 5% Sicherheitswidersiand	470R 0.3W 5% Fusile resistor	TH02	242.012	BC658/C Trenstisor SMD	BC85a/C Transistor
				TH03	242.012	BC858/C Tranaisor SMO	BC858/C Transistor
RF01	1SO.OM.70 I	2R2 0.3W 5% Sicherheitwldarafnd	2R2 0.3W 5% Fu«blli resistor	TH04	242.012	BCa56/C Transistor SMD	BC858/C Transistor
RF04	150.144.10	22R 0.4W 2% Metafilmwiderstand	22R 0.4W 2% Meffilm rauxtor				
				T101	242857	MMBTHIOLTI Transfstor SMO	MMBTHIOLTI TransHtOf
RHie	339.537.717 :	1 R 0.3W 5% Sichemeitswider stand	1R 0.3W 5% Fusible resistor	T131	249.250	BC858B Transistor SMO	BC858B Transistor
RM17	253.747 S	5R6 0.3W 5% Sicherheitwiderstand	5R6 0.3W 5% Fusible resistor	T132	339.555.241	BC848B Transistor SMD	BC848B Transistor
BL01	130.838.20	390R 1 W 5% Metalloxydwiderland	390R 1W 5% Mfttal oxide resistor	TK02	33t.SS5.241	BCB48B Truuilfor SMD	RC848B Trin—ur
RL07	309 580.952	1KR 0.5W 10% Sicherheitswidersiand	1KR 0.5W 10% Fusible resistor				
RL08	101 513.20	1aR 2W 5% Metalloxydwiderstand	1 BR 2W 5% Oxide metal resistor	TL01	339.556.787	BC337-40 Tranarlor	BC337-40 TranaClor
RLM	309 536 942	33R 1W 5% Metalloxydwiderstand	33R 1W 5% Men oxida resistor	TL02	261.825	Montageclip I	Clilpl
RLO«	490 006 7871	33R 2W 5% Metalloxydwiderstand	33R 2W 5% Metal oxide realsOf	TL02	309.005.026	S2055AF Tren«I»tor	S2055AF Transistor
RLM	203521.70	8R25W 10% Drahtwid erst and	8R25W 10% Wiferes.slof	TL13	339 556.767	BC337-40 Tranaistor	BC337-40 Transistor
RL11			15 R 0.5W 5% Fusible resistor				
RL12	103.131.10 S	OR560 0.5W 5% Sicherheitswiderstand	OR560 0.5W 5% Fusible resistor	TP01	102.067.60	BUL310XI Trenslitfof	BUL310XI Transistor
RL13	103.054.50 :	OR220 0.5W 5% Sicherheitswiderstand	OR220 0.5W 5% Fusible resistor	TP01	281.825	Montageclip I	Clilpl
RL13	103.131.10 S	OR560 0.5W 5% Sicherheitswiderstand	OR560 0.5W 5% Fusibf restisor				
RL13	243743 S	1R5 0.5W 5% Sicherheitswiderstand	1R5 0,5W 5% Fusible resistor	TR01	339.555.241	BC848B Transistor SMD	BC848B Transistor
RL22	103.321.70	75KR 1W 5% Metalloxydwiderstand	75KR 1W 5% Metal oxide resistor	TR08	339.555.241	BC648B Transistor SMD	BC846B Transistor
			82KR 1W 5% Metal oxide resistor	TR03	339.555.241	BC848B Transistor SMO	BC848B Tranaiator
RP01	203.696.40	5R1 5W 10% Drshlwid er stand	5R1 5W 10% Wire resistor	TT51	309.001.310	BF423 Transisior	BF423 Translator
RP02	110.651.00 S	25R 220V PTC-Widerstand	25R 220V PTC resistor	TT52	160 037.60	2SC2482N Transistor	2SC2482N Transistor
RP03	203 102.40	1K 7W 5% Drahtwiderstand	1K 7 W 5% Wire resistor	TT61	309001.310	BF423 Transistor	
RP06	2C3.695.90	18KR5W 5% Mitlatorydwdarstand	18KR 5W 5% Metal oxida resistor	TT62	160.037.60	2SC2482N Transistor	2SC2482N Transistor
RP07	41344301	4K75 0.25W 1% Metallfilmwiderstand	4K75 0.25W 1% Melal film resistor	TT7J	309.001.310	BF423 Transistor	8P423 Transistor
RP10	204 704 60	33R 3W 5% MetalloxydwidTstand	33R 3W 5% Meffl oxide resistor	TT72	160.037.60	2SC2482N Transistor	2SC2482N Transistor
RP20	130.498.80	OR220 3W 5% Metallfilmwiderstand	OR220 3W 5% Meial film resistor	TT81	352.875.5000	BC857B Trannitor SMO	BC857B Transistor
RP20	130.85530	OR270 3W 5% Metallfilmwiderstand	OR270 3W 5% Metal film r«s>sior				
RP21	309 530 716	TOM 0.7W 5% Schichtwider aland	10M 0.7W 5% Film resistor	TV01	249.250	BC858B Trannxtof SMD	BC858B Tran««lor
RP31	103.054.50 S	OR220 0.5W 5% Sicherheitswiderstand	OR220 0.5W 5% Fusible resistor	TV02	249250	BC858B Tran—tor SMO	BC858B Tr.nsrfor
RP31	243903 S	OR22 0.5W 5% Sicherheitswiderstand	OR22 0.5W 5% Fusible resistor				
HP32	103054.50 R			TX01	309001 228	BC558B Transitor	BC55BB Transistor
RP32	243 903 S	OR22 0.5W 5% Sk:hfrlre«tsw«dersiand	OR22 0.5W 5% Fusible resistor				
					103.381.90	Laitung mrt Sleeke IOpolig 420mm Chassis BV82 an CRT HT81	Cable with socket 10-pol* 420mm
RR01	100.37L00 3	BR2 0.5W 5% Sich-hellswidTStand	8R2 O.SW 5% Fusible resistor				

**VIDEO AMPLIFIER - AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKER
AMPLIFICATORE VIDEO - AMPLIFICADOR VIDEO**



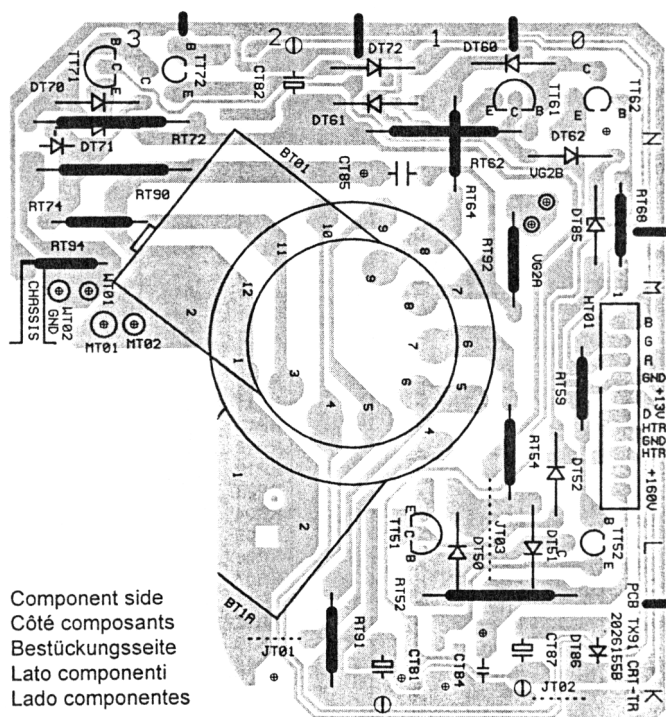
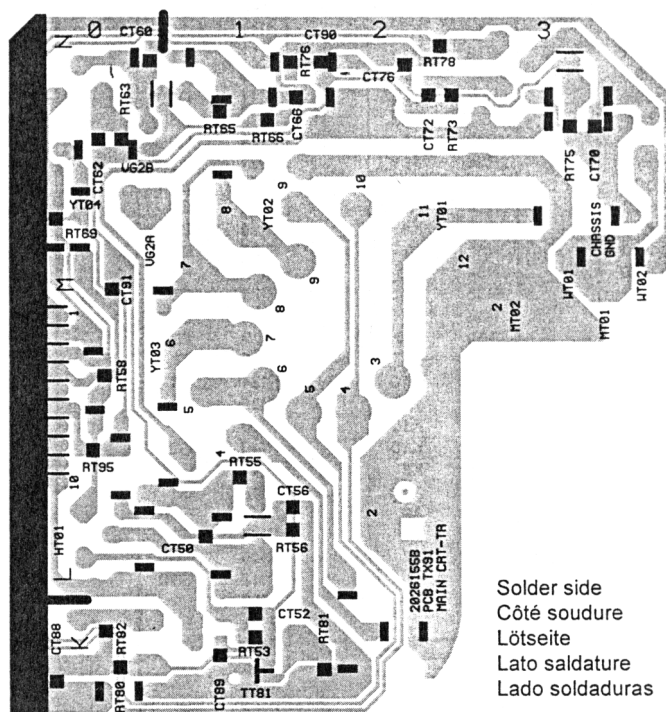
VHF / UHF TUNER MTM 4045



(For information only)

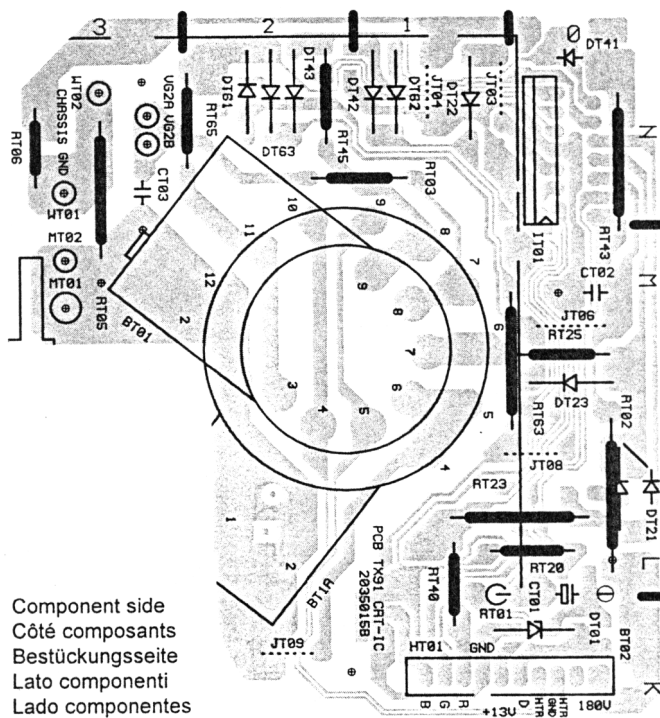
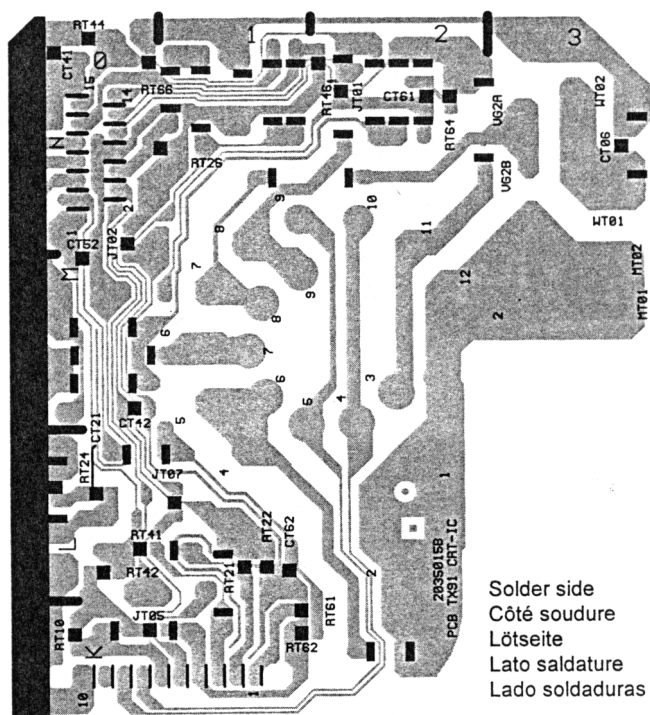
VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE
PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO

- TRANSISTOR VERSION -

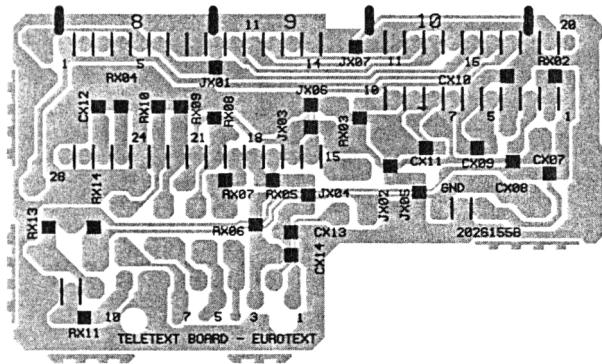


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PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO

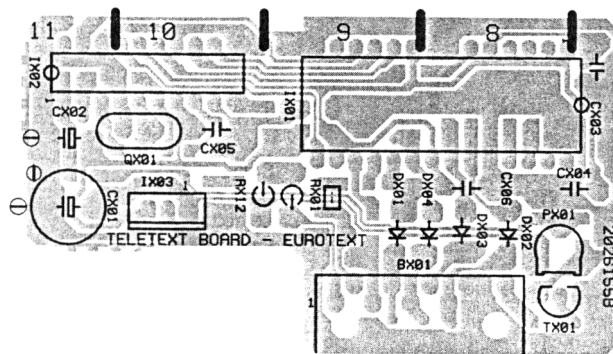
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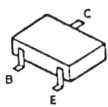
TELETEXT MODULE - MODULE TELETEXTE - VIDEOTEXT MODUL MODULO TELEVIDEO - MODULO TELETETO



Solder side
Côté soudure
Lötseite
Lato saldature
Lado soldaduras



Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes



BC 847 B
BC 848 A /B /C
BC 857 B
BC 858 B /C
DTC 144 EK
MMBTH10L



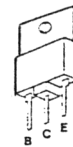
BF 423



2 SC 2482



BC 337
BC 558 B

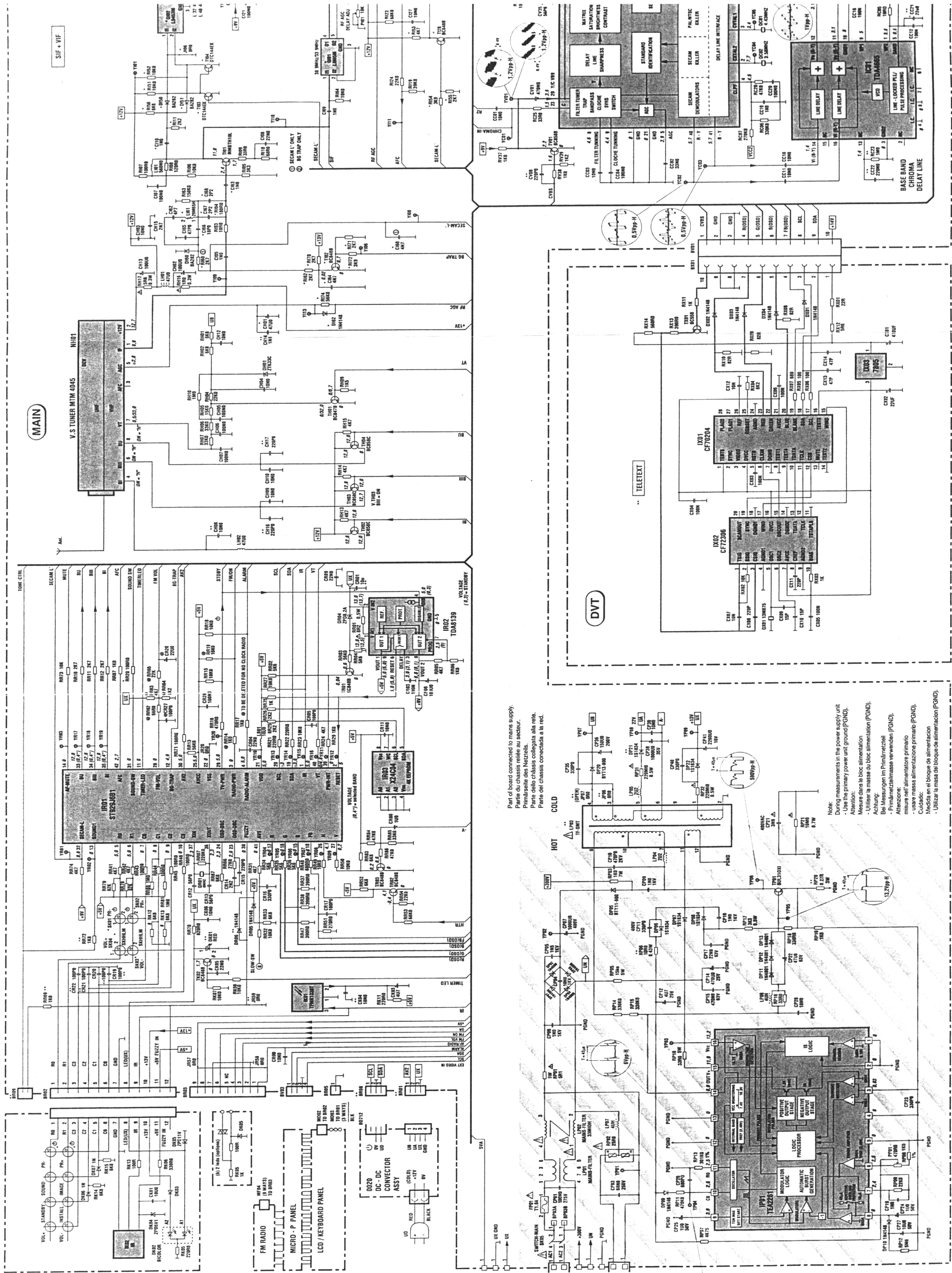


BUL 310 XI

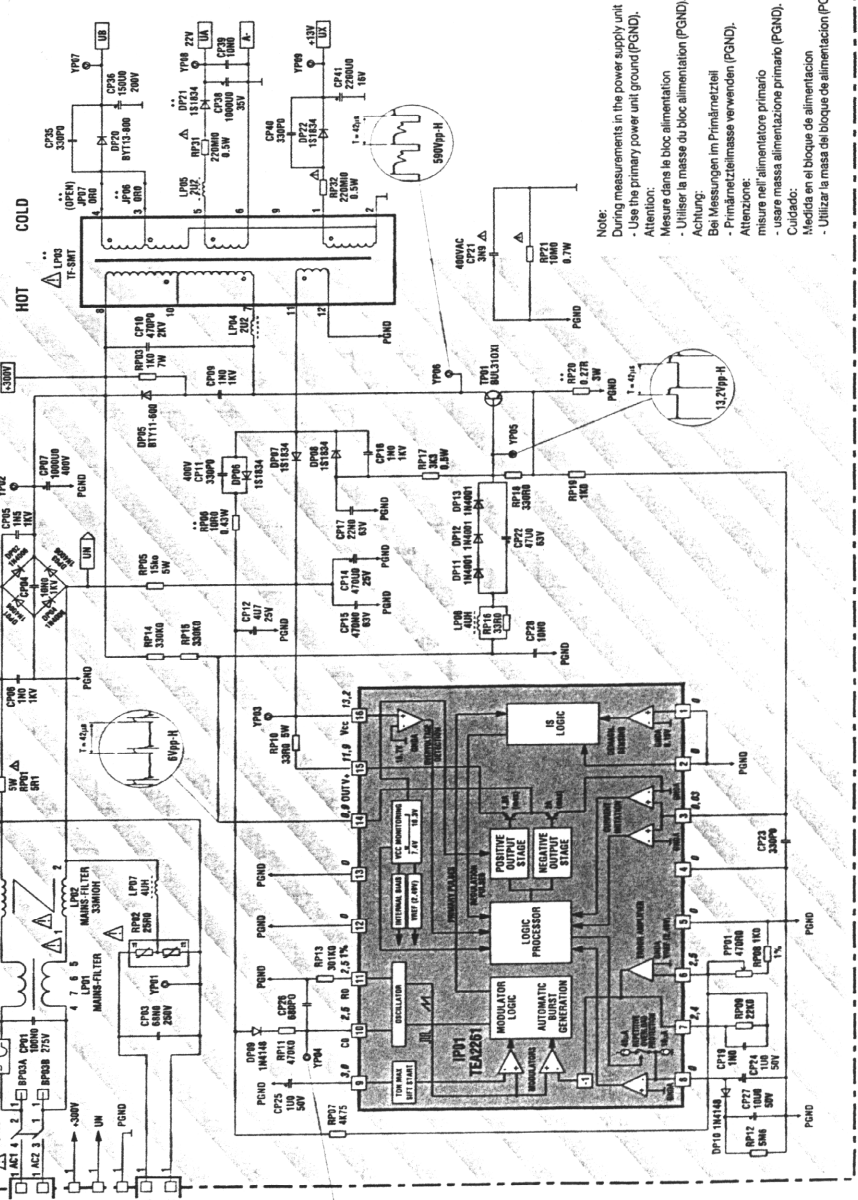


S 2055 AF

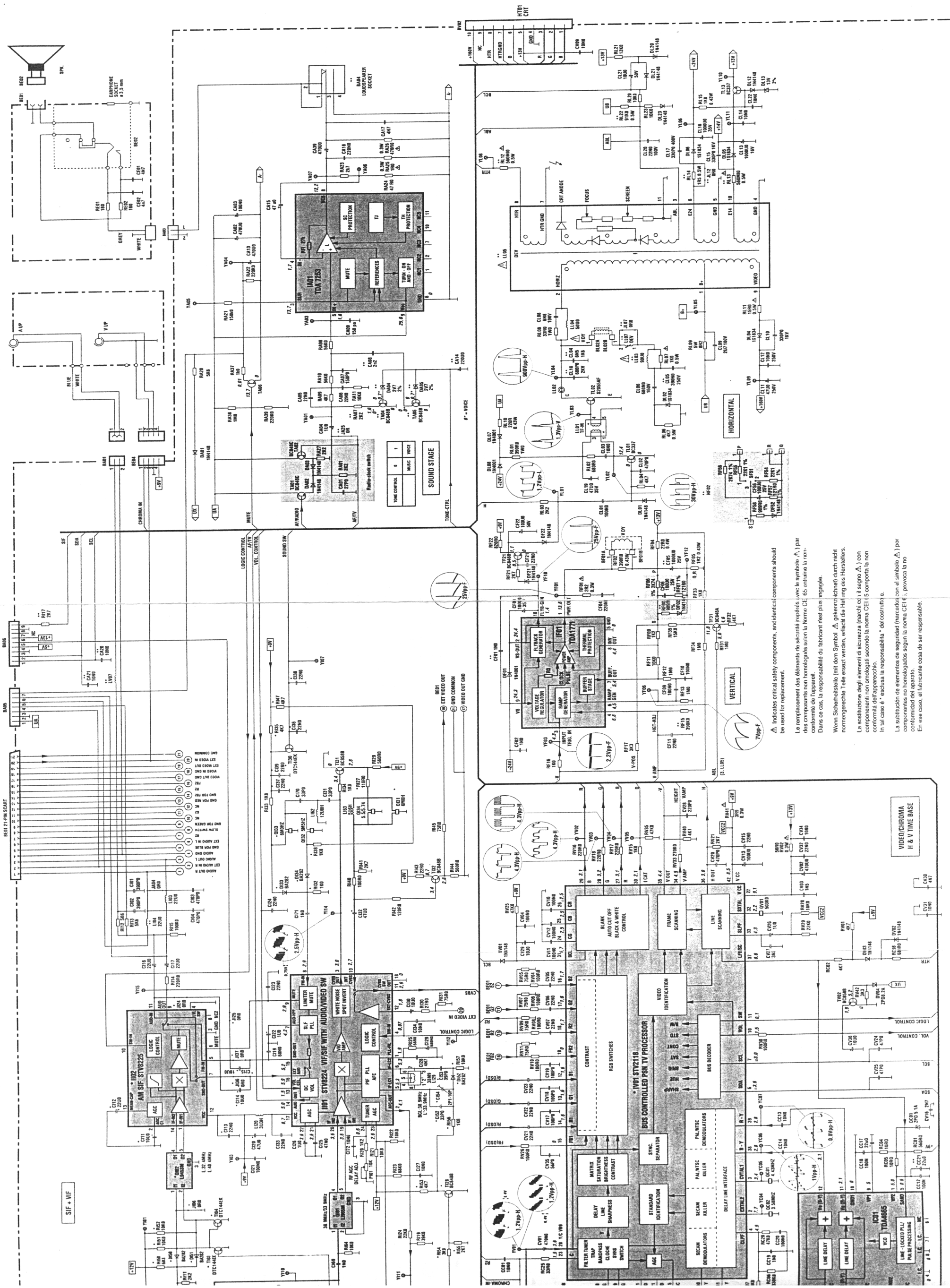
MAIN SCHEMATIC DIAGRAM - SCHEMA PLATINE PRINCIPALE - CHASSIS GRUNDPLATTE SCHALTBIID - SCHEMA PIASTRA PRINCIPALE - ESQUEMA PLATINA PRINCIPAL



Part of board connected to main supply.
Partie du chassis reliée au secteur.
Parte dello chassis collegata alla rete.
Parte del chassis conectada a la red.



Note:
During measurements in the power supply unit
- Use the primary power unit ground (PGND).
Attention:
- Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation (PGND).
Achtung:
- Primärnetzteilmasse verwenden (PGND).
Attenzione:
- Misura nell'alimentatore primario
- Usare la massa alimentazione primario (PGND).
Medida en el bloque de alimentación (PGND).
- Utilizar la masa del bloque de alimentación (PGND).



Le remplacement des éléments de sécurité répertoriés, avec le symbole Δ , par des composants non homologués selon la norme CEI 115 entraîne la non-conformité de l'appareil.

Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol Δ gekennzeichnet) durch nicht normungsgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

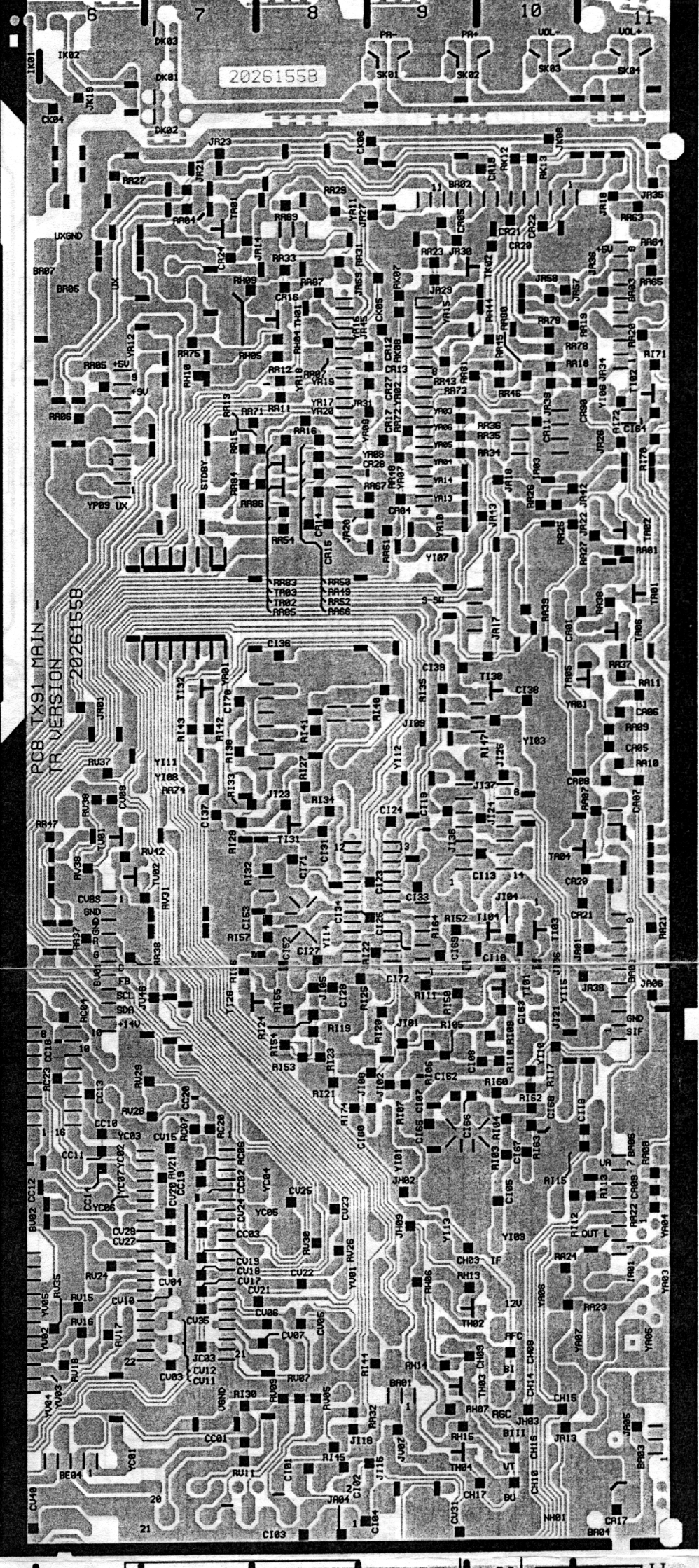
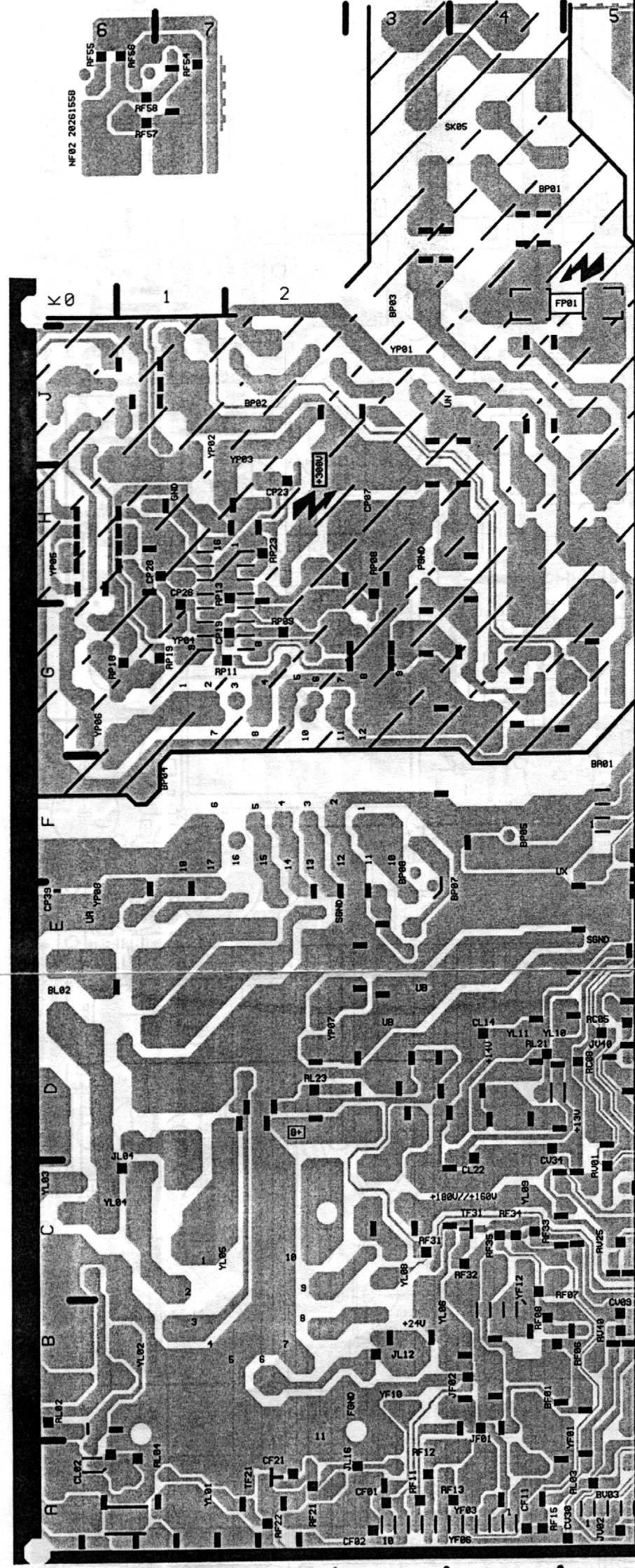
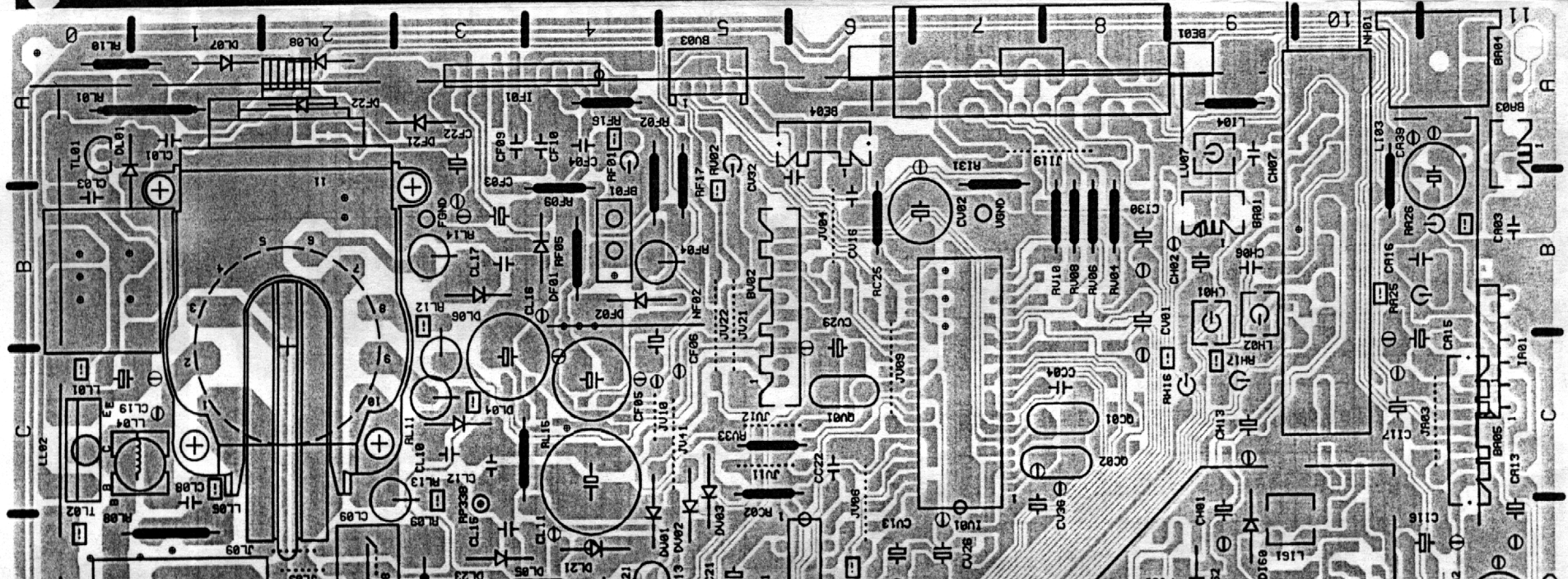
La sostituzione degli elementi di sicurezza (marcati col il segno Δ) con componenti non omologati secondo la norma CEI 115 comporta la non conformità dell'apparecchio.

In tal caso è esclusa la responsabilità del costruttore.

La substitución de elementos de seguridad (marcados con el símbolo Δ) por componentes no homologados según la norma CEI 115, provoca la no conformidad del aparato.

En ese caso, el fabricante cesa de ser responsable.

Solder side - Côté soudure - Lato soldaduras



MAIN BOARD - PLATINE PRINCIPALE - CHASSIS GRUNDPLATTE - PIASTRA PRINCIPALE - PLATINA PRINCIPAL

Component side - Côté composants - Bestückungsseite - Lato componenti - Lado componentes

